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JOURNAL

OF THE

STATISTICAL SOCIETY

OF

LONDON.

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NOTICE.

THE Council of the Statistical Society of London wish it to be understood, that, while they consider it their duty to adopt every means within their power to test the facts inserted in this Journal, they do not hold themselves responsible for their accuracy, which must rest upon the authority of the several Contributors.

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JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

MAY, 1838.

INTRODUCTION.

THE Council of the Statistical Society of London is of opinion that the time has arrived when the Fellows of the Society, and the public, will hail with satisfaction the appearance of a Journal devoted to the collection and comparison of Facts which illustrate the condition of mankind, and tend to develop the principles by which the progress of society is determined.

It is within the last few years only that the Science of Statistics has been at all actively pursued in this country; and it may not, even now, be unnecessary to explain to general readers its objects, and to define its province. The word Statistics is of German origin, and is derived from the word *staat*, signifying the same as our English word *state*, or a body of men existing in a social union. Statistics, therefore, may be said, in the words of the Prospectus of this Society, to be the ascertaining and bringing together of those "facts which are calculated to illustrate the condition and prospects of society;" and the object of Statistical Science is to consider the results which they produce, with the view to determine those principles upon which the well-being of society depends.

The Science of Statistics differs from Political Economy, because, although it has the same end in view, it does not discuss causes, nor reason upon probable effects; it seeks only to collect, arrange, and compare, that class of facts which alone can form the basis of correct conclusions with respect to social and political government.

These are the objects to which, in prosecution of the ends of this Society, the Journal will be devoted; and the Council looks forward with confidence to the time when, through the exertions of its own Members and of corresponding Societies throughout the country, the Journal will become an important instrument for developing and

diffusing the knowledge of truth, and for detecting and removing error and prejudice.

No other Society, and no other existing publication, has a more important or interesting end in view. "The noblest study of mankind is man;" and it cannot be contradicted, that the knowledge and proper appreciation of those facts which determine and explain the civilization, riches, power, and happiness of our own and of other nations, is not inferior in usefulness to any other science.

The scope also of Statistics is of a very extensive nature. They are closely allied to the other sciences, and receive contributions from all of them; they are, as it were, the link which connects them with the practical purposes of life.

Thus no statistical account of a country can be perfect without comprehending its Geography—a description of the extent and character of its surface, of the abundance or scarcity of water, the degree of heat or cold, of dryness or humidity, consequent upon its geographical position; with many other conditions of the first elements of existence, which all influence more or less the operations and comforts of men, and the production and consumption of wealth.

Statistics are connected with Geology, by the relation of the latter to the mineral wealth of a country, and to Agriculture. They enter into that part of Zoology which points out the means of sustenance, of industrial employment, and of commerce. The character of uncivilized nations is determined either by their geographical position, or by the nature of the animal kingdom which surrounds them. Their inhabitants become hunters or fishers, as game or fish abound; bold and enterprising when exposed to the attacks of the lion and the bear;—crafty and subtle when dependent for food upon the deer and quail. The possession of the horse leads them to become marauders; and that of cattle makes them herdsmen. The woollen manufacture of this country owes its existence to the possession of a particular breed of sheep, and the silk trade of France owes much of its prosperity to that of the silk-worm and mulberry. The last illustration shews the connection of Statistics with Botany. The cultivation of silk depends upon the existence of the proper food for the sustenance of the worm. Botany, which discovers the properties and uses of the vegetable kingdom, selects the food proper for this purpose; while Horticulture directs the best means of producing it, and of increasing its supply.

It is unnecessary to shew how every subject relating to mankind itself, forms a part of Statistics; such as, population; physiology; religion; instruction; literature; wealth in all its forms, raw material, production, agriculture, manufactures; commerce; finance; government; and, to sum up all, whatever relates to the physical, economical, moral, or intellectual condition of mankind. Mechanics discover the means of

abridging human labour; Chemistry enters largely into the economy of Arts; Medicine practises on the bodies of men; all these sciences operate upon human interests, and their powers and effects are susceptible of statistical exposition. Even Astronomy, by exhibiting the influence of the heavenly bodies upon the seasons, and Meteorology, by explaining the causes and chances of atmospheric changes, are connected with Statistics; since both the seasons and the atmosphere materially affect the employments and the physical condition of men. In fact, as all things on earth were given to man for his use, and all things in creation were so ordained as to contribute to his advantage and comfort, and as whatever affects man individually affects also man in a state of society, it follows that Statistics enter more or less into every branch of Science, and form that part of each which immediately connects it with human interests.

Like other sciences, that of Statistics seeks to deduce from well-established facts certain general principles which interest and affect mankind; it uses the same instruments of comparison, calculation, and deduction: but its peculiarity is that it proceeds wholly by the accumulation and comparison of facts, and does not admit of any kind of speculation; it aims, like other sciences, at truth, and advances, *pari passu*, with its development.

The Statist commonly prefers to employ figures and tabular exhibitions, because facts, particularly when they exist in large numbers, are most briefly and clearly stated in such forms, and because he is not satisfied with giving deductions, which admit of question, but supplies the material which each individual may himself examine and compare. It is not, however, true that the Statist rejects all deductions, or that Statistics consist merely of columns of figures; it is simply required that all conclusions shall be drawn from well-attested data, and shall admit of mathematical demonstration.

The History of Statistics in this country will occupy but a short space. Until within a very few years, England possessed few works of much authority embracing all the various branches of the Science. Among the few valuable labours of this kind may be mentioned Sir John Sinclair's "Statistical Account of Scotland," Sir F. M. Eden's "State of the Poor," and Colquhoun's "Treatise on the Wealth, Power, and Resources of the British Empire." But separate branches of this science had been ably treated by various writers. Indeed it is probable that no other country is so well able to trace in detail the progress of its prosperity during the last century and a half, since the date of the Reformation, as Great Britain.

Towards the close of the seventeenth, and the commencement of the eighteenth century, Reynolds, Child, and Petty, published very valuable information relating to the Commerce, Manufactures, Circulation, and

Finance of the country. At a later period Price, Arthur Young, and Chalmers, treated the subject of Population with great ability. Young has left a monument of his talent and industry in his various publications relating to Agriculture, and Playfair's *Work on Commerce* has a high reputation.

Many other similar publications in particular branches of the science might be mentioned; but the first which comprehends all the details of Statistical Science was the account of Scotland already noticed, which appeared in the year 1791. A new edition is now in course of publication, which brings the information down to the most recent date. In the year 1793, the Government established a Board of Agriculture in England; and, before its dissolution, which occurred in a few years after its establishment, it collected and published some useful statements relating to the state of Agriculture in each county.

Little, however, of a practical character, and on a comprehensive scale, was effected until the year 1832, when Lord Auckland and Mr. Poulett Thomson, who then presided over the Board of Trade, established a Statistical Office in that department, to collect, arrange, and publish statements relating to the condition, and bearing upon the various interests of the British Empire. The volumes annually printed, and laid before Parliament by this Office, are too well known to require further notice on the present occasion. In the summer of 1833, the Statistical Section was formed in the British Association for the advancement of Science, during the period of its meeting at Cambridge; and before the close of that year, the Manchester Statistical Society was established. The Statistical Society of London, which had been projected at Cambridge, was established in the spring of 1834, and since that time the pursuit of this science has extended very rapidly. Societies for prosecuting statistical enquiries have sprung up throughout the kingdom. Numerous important publications, devoted wholly to statistical expositions of the condition and resources of the country, have appeared, among which may be noticed, without detracting from the merit of others, the Statistical Accounts of part of Ireland, by the Officers of the Irish Ordnance Survey; Macculloch's "*Statistics of the British Empire*," with the "*Dictionary of Commerce*," by the same author; M'Gregor's "*Statistics of Nations*;" and Porter's "*Progress of the Nation*." The valuable accounts of the state of Education in the towns of Manchester, Salford, Bury, Liverpool, and York, prepared and published by the Statistical Society of Manchester, deserve to be specially noticed among the most important recent publications in the educational branch of Statistical Science. The numerous Parliamentary enquiries into the condition of the population, agriculture, and commerce of this country, which have been commenced during the last ten years, afford an important acknowledgment on the part of the Legislature, that sta-

tistical results are necessary for the right comprehension of the principles which should guide the proceedings of Government. The results of these investigations form a collection of Statistical documents, which, for extent and value, have not been surpassed in any country.

With the view, therefore, of encouraging this growing taste, of uniting the efforts of existing Societies, and of promoting the establishment of others, as well as of affording to individuals a channel of communication upon Statistical subjects, this Journal is commenced. It will contain an account of the Proceedings of the Statistical Society of London, and of those Societies in the country with which it is in correspondence; notices of their Meetings; Copies or Abstracts of Papers read before them; communications on Statistical Subjects; Queries and Tabular Forms for prosecuting original Enquiries; Copies or Abstracts of Parliamentary Reports and Papers relating to Statistics; Reviews and Lists of new Statistical Works, with useful Tables, and such other matters as will promote in various ways the object of the publication.

FOURTH ANNUAL REPORT OF THE COUNCIL OF THE STATISTICAL SOCIETY OF LONDON.

THE Council of the Statistical Society of London, in presenting their Fourth Annual Report, have great satisfaction in stating that, a review of the proceedings of the past year affords them much reason to congratulate the Fellows of the Society on its progress, and on its continually improving prospects of usefulness, arising from an evident increase of activity, and consequent extension of operations.

A Committee has been appointed by the Council for the purpose of prosecuting statistical enquiries into the state of education in a portion of the parishes of London, and it has already completed an investigation of this description throughout a populous and extensive district, comprising the parish of St. Martin-in-the-Fields, and the four parishes of the Strand Union.

The First Report of this Committee has been printed and published, containing a full and minute account of this enquiry; but copies of this document having recently been distributed to the Fellows of the Society, it is here unnecessary to add any further remark upon its contents. It may, however, be proper to observe that, the Council, considering an extensive circulation of information of this nature to be highly conducive to the advancement of the objects and interests of the Society, ordered a large impression of this Report, and have consequently been enabled to present copies of it to many public bodies, and to individuals distinguished for enlightened benevolence, by whom such a statistical exhibition of educational facts is likely to be appreciated and beneficially used.

This Committee is at present in active operation, and has nearly completed an enquiry into the state of the schools in the parishes of St. John's and St. Margaret's, in Westminster.

The Council has formed and appointed a Committee on another subject of much importance and general interest, which is best explained in the words of the Resolution, namely, "to collect a statistical account of the various strikes and combinations which have existed in different parts of the United Kingdom for the purpose of altering the rate of wages, and of introducing new regulations between masters and men. Such accounts to exhibit the condition of the workmen at the time of the commencement of the strike or combination, and the terms and conditions upon which they resumed work; showing also, as far as the same can be statistically stated, the permanent effects of the several disputes upon the character and condition of the workmen."

The members of this Committee, after due deliberation, and with an anxious desire to avoid even the appearance of party bias, have prepared, and with the sanction of the Council have printed, a numerous list of queries, designed to elicit the complete and impartial history of strikes. Copies of these queries, accompanied with a printed explanatory letter, have been transmitted to many intelligent individuals connected with, or interested in the welfare of, manufactures and other industrial pursuits in which large bodies of operatives are employed; also to the Editors of all Newspapers in manufacturing districts, and to every Mechanics' Institute in the Kingdom. Many replies have been received, and the Council have the satisfaction to report that, promises of assistance are offered from various quarters.

In the Report of last year the attention of the Fellows was particularly invited to the formation of Committees, in conformity with a resolution expressly passed by the Council, with the view of increasing the activity of the Society by facilitating the co-operation of its members. In accordance with this plan, an important Committee has been formed, for the purpose of collecting the Statistics of Life, embracing enumerations of Births, Deaths, and Marriages; and Population, with or without distinction of age, sex, climate, or occupations. To point out the defects in existing observations; to suggest improved forms and methods of gathering Statistics of Life; and to recommend the objects of enquiry to which attention may be most profitably directed.

This Committee includes in its list of members several eminent Actuaries, and, with much deliberation, it has prepared several comprehensive and efficient tabular Forms, for the collection of information on mortality, from Insurance Societies, Hospitals, Prisons, Lying-in Charities, Foundling Hospitals, Lunatic Asylums, Prison-Ships, and other similar establishments; and the Council have the pleasure to report that, a readiness to comply with the requisitions of the Committee has been expressed by the officers of several institutions.

The Committee appointed to make enquiries on the Statistics of Crime, has carefully prepared a set of tabular Forms for collecting the circumstantial history of criminal offenders, previous and subsequent to the commission of their offences. This Committee has had frequent communications with the Commissioners of Police, from whom it has received every facility for the examination of their official records, together with other valuable assistance and information. The Council is at present in communication with the Government Authorities, to obtain permission to examine the Registers kept at the General Penitentiary, with

the view of making extracts of interesting facts, and of ascertaining, by comparison with the mode of registration there adopted, how far the forms prepared by the Committee are capable of practical application in recording the Statistics of Crime.

In the course of the year the Council has sent the Society's Diploma to each of the eight following distinguished individuals, who have been elected Foreign Honorary Members and also to six others previously selected :—Count Serristori, of Florence ; Professor Von Schlieben, of Dresden ; Baron Charles Dupin, of Paris ; Count Gräberg de Hemsö, of Stockholm ; Professor Auguste de la Rive, of Geneva ; Admiral Greig, of St. Petersburg ; Dr. Julius, of Hamburg ; M. Guerri, of Paris.

The Council having suggested the propriety of forming a Class of Corresponding Members residing abroad, a Special General Meeting of the Fellows of the Society, for the consideration of the subject, was convened on the 3rd of July, when a Resolution was passed which conferred on the Council a discretionary power to appoint, on their own nomination, or on that of other Fellows of the Society, Corresponding Members, who shall be non-resident in the United Kingdom.

The following Gentlemen have accordingly been appointed :—

Dr. Henry Harpur Spry, Calcutta ;

Thomas Ewing, Esq., Hobart Town ;

Dr. Frederic Corbyn, Calcutta ;

Edward Walter Bonham, Esq., H. M. Consul at Tabriz, in Persia ;

Henry Toby Prinsep, Esq., Calcutta ;

Francis J. McGregor, Esq., H. M. Consul at Elsinour.

The contributions of books, and other Statistical documents, for which the Society is indebted to its Members, and other Friends, in England and abroad, have continued to be as numerous as usual. Several of the papers which have been read at the ordinary Meetings during the past year, have been of a highly interesting character. Of these the more important have been selected by the Council to form the second Part of the first Volume of the Society's Transactions ; but at present it has been deemed expedient not to appropriate the limited funds of the Society to the expense of proceeding with a further portion of this costly publication, while the outlay required by the Committees for the prosecution of original enquiries seems to promise a more direct return of advantage to the interests and progress of the Society. Copies of the published first Part of the Transactions have been presented by the Council to the principal Scientific and Literary Institutions in the United Kingdom, and to the Foreign Honorary Members abroad.

During the present Session, of which a portion belongs to the past year, the attendance at the ordinary Meetings has been more than usually numerous. There has also been a considerable increase in the number of Members who occasionally visit the Society's Rooms, for reference to books and other documents, and especially for the purpose of enquiring how, where, and of whom, particular Statistical information can be obtained.

The direct and incidental use which at present is made of Statistical documents in scientific and philosophical writings on the most important moral and political questions, and the now frequent and large inser-

tions of Statistical notices in the popular periodical publications of the day, may be adduced as indicating the prevalence of a sense of the indispensable necessity of constantly adverting to the tabulated numerical results of systematic enquiries. It is indeed truly said that, the spirit of the present age has an evident tendency to confront the figures of speech with the figures of arithmetic; it being impossible not to observe a growing distrust of mere hypothetical theory and *à priori* assumption, and the appearance of a general conviction that, in the business of social science, principles are valid for application only inasmuch as they are legitimate inductions from facts, accurately observed and methodically classified—that all conventional rules, in order to be permanently beneficial, must have a strict conformity with the physical and moral laws of nature, which are ascertainable only by observing, collecting, and registering the positive facts of experience—that, in short, statistical data must constitute the *raw material* of all true systems of economy and legislation, local and national. A more decisive proof of the just estimate which is formed of the value, and of the deep interest which is felt for the result, of Statistical researches is presented in the continual formation of new Societies for the purpose of instituting enquiries of this nature; and it affords much satisfaction to the Council to announce that, in the populous commercial town of Liverpool, a Statistical Society has recently been formed, which has already commenced several important enquiries, among which is one on the subject of the trade between Great Britain and Ireland.

A similar institution, entitled the Statistical Society of Ulster, has lately been established, and promises to become usefully active, at Belfast, to the limits of which town it was originally intended to be confined; but the interest excited on the subject having become unexpectedly great, it was finally determined to extend the scope of its operations to the whole province.

Both these institutions are in immediate communication with this Society, and have adopted its regulations and system of operation.

In the important city of New York, a Statistical Society has been appointed and established by the Legislature of that State; and the Council feel gratified in reporting that, the principles and regulations which form its Constitution have been avowedly adopted from those of the Statistical Society of London.

In the city of Turin an official department has been established by the Sardinian Government for the collection and arrangement of Statistical facts. Previous to its formation, the officer charged with its arrangement sought and obtained from the Council a statement of the plan and mode of operation of this Society.

In Calcutta a Statistical Committee has been formed by the Asiatic Society of Bengal, and the Governor-General has afforded facilities for the prosecution of its enquiries, and granted access to all official Records.

The Statistical Society of Manchester continues in active operation, and has published and presented copies of its Report upon the state of Education in the city of York, and also the results of an enquiry into the condition of the working classes in Manchester, and its neighbourhood.

The Statistical Society of Bristol has published the first annual Report

of its Proceedings, and is carrying on an enquiry into the state of the Poor in that city.

A friendly intercourse with all these Societies has been established by the Council, who have been anxious to communicate with them on every occasion of interest, and to carry on a correspondence with the view of reciprocating any advantages peculiar to each.

The state of the Society with respect to the number of its Members remains very nearly the same as at the time of the last Report. Twenty new Members have been elected, who supply the deficiencies occasioned by decease and withdrawal. The whole number of Members at present on the Society's books is 402; of these 14 are Foreign Honorary Members, 6 are Corresponding Members residing abroad, and 382 are Annual Subscribers, of whom 32 have compounded.

The annexed Account, exhibiting the receipts and expenditure of the past year, has been duly examined and verified by the Auditors appointed for that purpose. Their Report will be read. The Council would direct attention to the fact, that a sum of 119*l.* 12*s.*, paid in 1837, is for expenses incurred in, and belonging to, the last quarter of 1836.

The amount of arrears, composed chiefly of the subscriptions of Members residing in distant parts of the country and abroad, is unusually large; and with reference to this unsatisfactory circumstance, the Council has proposed to introduce a new Regulation, on the present occasion, designed to prevent its future recurrence.

In consequence of the regretted decease of Mr. Bonham Carter, it has devolved upon the Council to elect a new Trustee, and they have much satisfaction in reporting that, Sir Charles Lemon has kindly consented to undertake that Office.

In conclusion, the Council, considering that the future success and prosperity of the Society must depend very much on the amount of assistance afforded by the general body of the Fellows, would earnestly reiterate the solicitations made in the last Report, that, the Members will strive to avail themselves of any opportunities afforded by their respective stations and pursuits, to supply the requisite aid and information for carrying on, in a satisfactory manner, the tasks undertaken by the Committees; and, finally, they desire to express a confident hope that, by increasing progressively in efficiency and usefulness, the Society will eventually realise many of the beneficial effects which its founders anticipated; and that it will permanently hold a place among the important institutions which are steadily contributing to the welfare and improvement of this and other countries.

**QUERIES OF THE STATISTICAL SOCIETY OF LONDON
RELATING TO STRIKES.**

1. Name of town or district.
2. Population of ditto.
3. Characteristics of the population, and of their staple employ, with reference to the strike.
4. State the circumstances of the trade, whether flourishing or otherwise, at the time of the strike.
5. State the occupation of persons engaged in the strike or combination, shewing the particular class with which it originated.
6. What were the average weekly earnings immediately before the strike, and when in full work, of the classes with whom the strike originated?
7. Were the earnings, or other circumstances of the workmen, with whom the strike originated, inferior to those of persons employed in the same branch of manufacture, in the same or neighbouring towns or district?
8. Were they in any way, and in what way, superior?
9. Did any Trades' Union exist in the district before the strike, or was any formed in consequence?
Number and description of its members—its constitution—rules for management—remuneration of officers—its declared objects—mode of operation.
10. Were any, and what, compulsory measures taken to make workmen join the Union?
11. Did any association of masters exist in the district before the strike, for counteracting the operations of Trades' Unions, or for any other purpose?
12. Did the strike originate in the town or district, or was it part of a more extensive plan, and was it fomented by delegates from any other body of workmen?
13. Was the strike under the direction of any Committee; and, if so, what was its constitution and mode of operation; and had that Committee absolute and secret powers?
Endeavour to furnish a copy of the rules.
14. What was the ostensible cause of the strike or combination; state whether any and what notice was given, either by the masters or men, as the case might be, of the time of its commencement.
15. Were any, and what, proposals for accommodation made by either party for the acceptance of the other?
Send copies of any papers connected with such proposals.
16. On what day did the strike commence?
17. In how many establishments did the strike prevail? In how many did the workmen continue employed.
18. State the number of persons engaged in the strike or combination, and the number who continued at work.
19. State the number and description of workmen and other persons whose employments depended upon those of the persons engaged in the strike, and who were consequently deprived of occupation during its continuance.

20. What were the weekly earnings of the persons last described?

21. State the estimated value of buildings and machinery rendered inactive by the strike.

22. State the estimated floating capital of manufacturers and masters rendered inactive, and consequent amount of loss.

Detail the mode in which this estimate is made.

23. How were the different descriptions of work-people supported during the strike? From what source was the fund derived? What were the rates of weekly allowance at different periods? What the aggregate sum thus distributed? How long did the fund last? What were the expenses of management? Send papers if any.

24. Was any subscription raised, or money voted from corporate, or other funds, for relieving distressed persons during the strike? What regulations or limitations were imposed in the distribution of the money?

25. State the sums expended for the relief of the poor from the parish funds, in each week during the strike, and in each of the twelve weeks thereafter, comparing the same with the corresponding period in the preceding year.

26. Were any of the work-people able to resort, and did they so resort, to any other, and what other, modes of occupation, at any time during the continuance of the strike?

27. How otherwise did they pass their time?

28. Was there any perceptible increase of the class of street-beggars.

29. Was much sickness or increased mortality observable during the strike, or consequent upon it?

30. State the number of persons who were admitted into the several hospitals, or received medical attendance, during each week of the strike, and for each of the twelve weeks thereafter. Give weekly statements for the corresponding weeks of the preceding year.

31. Was there more than the usual amount of drunkenness and disorderly conduct witnessed in the streets?

32. Were any, and what, acts of violence against persons or property committed by the discontented workmen, particularly with reference to new hands employed or old hands not turning out?

33. Was it necessary to call in the aid of military power, or to add to the force of the police, in order to preserve the peace?

34. Can loss of human life be either directly or indirectly attributed to the strike?

35. Were any ill effects visible in the criminal calendar attributable to the strike?

Give weekly statements of the number of persons committed, and the nature of their offences, during the continuance of the strike, and for three months thereafter. Give also statements of the committals in the corresponding weeks of the preceding year.

36. Did the people while unemployed contract degrading habits? Were those habits abandoned or continued beyond the period of the strike?

37. Was any diminution observed in the attendance at schools of the children of parties engaged in the strike?

38. What was the amount of money in the savings' banks of the

district on the 20th of November in each of the three years preceding the strike; and what was the amount just before the strike began?

39. What proportion belonged to the class of discontented workmen?

40. What was the aggregate amount of deposits when the strike ended?

41. What proportion then belonged to the discontented class?

42. Give similar statements for any Friendly or other Benefit or Loan Societies?

43. Did the work-people contract debts, and to what amount, when unemployed?

44. Have they since been able to pay off their debts?

45. Did the manufacturers and masters have recourse to any, and what, means for supplying the places of discontented workmen?

In particular, were any mechanical inventions newly introduced to that end?

46. How far were those measures successful?

47. State the day on which the strike ended. How many weeks were the workmen unemployed?

48. How many, when willing to work, were able again to find employment?

49. By what means were they induced to resume work?

50. Upon what terms did they return to work?

51. State the number of new hands who were permanently retained by the masters after the strike?

52. What rate of wages did they pay to new hands, compared to what had before been paid to workmen similarly employed?

53. What number or proportion left the district, or continued in it unemployed, or employed in occupations different or inferior in emolument to those they had previously filled?

54. Has there been any difference observable in the mode of living, and in the personal and family comforts enjoyed by the operatives before and since the strike?

55. Have any of the master manufacturers been induced by the consequences of the strike to quit business or to remove to other localities, or have any of the masters failed in consequence of the strike?

56. Estimate the pecuniary loss to the town or district occasioned by the strike, and distinguish the proportions of that loss borne by the workmen, the manufacturers or masters, the shopkeepers, and other classes, respectively?

57. What has been the effect of the strike on the trade of the town or district?

ESTABLISHMENT OF PAUPER SCHOOLS.

On the Establishment of County or District Schools, for the Training of the Pauper Children maintained in Union Workhouses. By JAMES PHILLIPS KAY, Esq., Assistant Poor-Law Commissioner. Part I. (to be continued).

The workhouses of 35 Unions in Norfolk and Suffolk are now completed, and are in full operation. These Unions contain 537,027 inhabitants, or about one twenty-sixth part of the population of England and Wales. In the week ending 9th December, 1837, the workhouses of these Unions contained.

Youths from 9 to 16	483	} 903	} 1906
Girls from 9 to 16	420		
Boys from 2 to 9	547		
Girls from 2 to 9	456		
Infants under 2			259
Total			2165

The children above 2 years of age are divided, according to their civil condition, into the following classes:—

Bastards	543
Orphans	382
Children deserted by father	279
„ deserted by father and mother	54
„ of men undergoing punishment for crime	171
„ of persons dependent on parochial aid on account of mental or bodily infirmity	116
„ of able-bodied widows resident in the Union Workhouse	144
„ of able-bodied widowers resident in the Union Workhouse	36
„ belonging to large families of able-bodied labourers, admitted into the Workhouse as relief to their parents	122
„ of able-bodied parents resident in Workhouses	59
Total	1906

It is obvious that all these, with the exception of the small number in the last class, will be mainly, if not entirely, dependent for their training on the Guardians, or they will remain so long dependent as to render their education a subject of great importance, even when considered only in relation to its probable effects on the amount of pauperism, which has formerly been directly reproduced from such sources, and which would probably be perpetuated without such care.

The last class, which consists of the children of able-bodied parents who seek a temporary asylum with their families in the workhouse, make but a transient stay there.

Some of the results of the previously existing systems of instruction upon the intelligence of the pauperised classes, are exhibited in the following Tables.

Return respecting the Paupers above the Age of 16, in the Workhouses of the Norfolk and Suffolk Unions and Incorporations, on the 12th day of June, 1837.

Description of Pauper.	Number in the Work-house.	Number who can Read.			Number who can Write.			Number who can neither Read nor Write.	Number who had been in a Workhouse previously to the formation of the Union.
		In a superior manner.	Decently.	Imperfectly.	In a superior manner.	Decently.	Imperfectly.		
MEN :									
Able-bodied . . .	123	2	36	10	1	14	7	68	36
Temporarily disabled	50	5	14	4	2	11	7	24	28
Old and infirm . .	513	12	112	58	3	69	37	307	329
WOMEN :									
Able-bodied . . .	355	18	95	75	3	18	27	153	167
Temporarily disabled	69	5	16	13	1	1	11	34	47
Old and infirm . .	349	4	53	40	..	18	16	232	243
Total . .	1,459	46	326	200	10	131	105	818	850
		572			246				

That an equal need of instruction prevails in other parts of England is proved by the following Table.

Return respecting the Paupers above the Age of 16, in the Workhouses of the 12 East Kent Unions, on the 12th day of June, 1837.

Description of Pauper.	Number now in the Work-house.	Number who can Read.			Number who can Write.			Number who can neither Read nor Write.	Number who had been in a Work-house before formation of Union.
		In a superior manner.	Decently.	Imperfectly.	In a superior manner.	Decently.	Imperfectly.		
MEN :									
Able-bodied . . .	16	1	5	3	..	4	1	7	11
Temporarily disabled	85	1	29	15	..	24	15	33	52
Old and infirm . .	446	7	164	63	1	86	74	205	338
WOMEN :									
Able-bodied . . .	104	3	40	23	1	18	13	36	50
Temporarily disabled	113	7	29	19	1	7	19	54	69
Old and infirm . .	286	6	94	50	1	21	15	137	214
Total . .	1050	25	361	173	4	160	137	474	734
		559			301				

The following Table shews the state of the instruction of the children in the workhouses, even after some improvements had been effected in the schools ; and an idea of the state of the children before these improvements were in progress, may possibly be in some degree realised from an attentive consideration of these facts.

	Youths from 9 to 16.	Boys from 2 to 9.	Girls from 9 to 16.	Girls from 2 to 9.	Total.
Number who can Read well . . .	206	70	173	30	479
„ who can Read imperfectly .	217	149	207	186	759
„ who cannot Read . . .	62	267	38	225	592
„ who can Write well . . .	122	6	47	1	176
„ who can Write imperfectly .	138	56	97	33	324
„ who cannot Write . . .	211	398	262	407	1278

There are some slight inaccuracies in this Table, which do not, however, impair the general statement.

It is difficult to perceive how the dependence of the orphan, bastard, and deserted children, and the children of idiots, helpless cripples, and of widows relieved in the Union Workhouses, could cease, if no exertion were made to prepare them to earn their livelihood by skilful labour, and to fit them to discharge their social duties by training them in correct moral habits, and giving them knowledge suited to their station in life.

It may be important to consider what is the usual training of an agricultural labourer's child under his father's roof, and in what respects it may be proper to imitate that training in educating the children who are necessarily maintained in workhouses.

The child of a labourer reared beneath its parent's roof is early trained to labour. At a very tender age the lad follows his father a-field ; he rides the horses home or to water ; he is employed to scare the crows from the recently sown corn ; by-and-by, he assists his father when thrashing in the barn ; he drives the plough-team. At hay-time the whole family, both boys and girls, find constant work ; at harvest they are very early employed in gleaning, and at seed-time they work at wheat-dropping. The boys thus become gradually initiated in the duties of husbandry, until, assisting more or less in ploughing, harrowing, thrashing, milking, and the charge of horses, they take their station in some department of husbandry, commonly first as team-men ; and afterwards are gradually employed in those departments of labour requiring greater skill, and implying more confidence in their integrity and industry. This is the industrial training of a labourer's boy when resident under his father's roof.

The girls do much work a-field. I have already alluded to their services in the corn and hay harvests, and at wheat-setting. They are also employed in carrying their father's provisions to the field, in stone-gathering, in hoeing, in turnip-topping, and other agricultural work which is not deemed too laborious to be performed by a female in the

rural districts. In the labourer's own household (the more appropriate scene of female exertion and care) the girls learn to scour the floors, to wash the linen, to sew and knit, and to clean the few utensils which their father may possess; to assist their mother in baking or in cooking their frugal meal, or in nursing a younger child. The girls thus acquire a knowledge of domestic duties, and become fitted (too frequently it is to be feared not so fully as could be wished) to perform the domestic duties, and to encounter the domestic cares of a labourer's household.

Little can be said respecting the training which the children of labourers receive in useful learning suited to their station in life, because few schools exist in the rural districts, and the instruction in many of those which do exist is meagre. Neither can it be said that the religious instruction of the labourer's family is always satisfactorily promoted by the existence of customs such as prevail in the households of the Scottish peasantry; but the domestic and social sympathies are awakened and cherished by mingling with their father's family, and associating with their neighbours.

But if an orphan, bastard, or deserted child, or the child of an idiot, helpless cripple, felon, or widow be maintained in the Union workhouse from the age of 3 to the age of 14, when he ought to go to work, one of two results must ensue.

1st. Either the boy or girl must at that period have acquired such habits of industry, such skill in some useful art, and such correct moral habits, as to render his services desirable, in which case he will go to service, and his dependence will cease; or 2ndly, by neglect, or by the adoption of a system of training not calculated to prepare them for the discharge of the practical duties of their station in life, the pauper children maintained in workhouses are *not qualified for service*, and then it will become necessary to adopt the old expedient for the removal of the burthen created by the absence of a correct system of moral and industrial training, viz.:—*to apprentice the children to a trade or calling*, by paying a premium to some artisan to instruct them in an art by which they may earn their subsistence.

The children maintained in the workhouses, being of the classes previously described, will necessarily reside there during a period considerably longer than that which is indicated in the following Table; because the results collected in that table, were obtained during the period of transition when a large portion of the children, who will reside in the workhouse for considerable periods, had only recently been received into them.

Statement of the Period during which Children of both Sexes, between the Ages of 2 and 16, have resided in Workhouses in Norfolk and Suffolk: in Answer to a Circular issued 3d January, 1838.

Less than a fortnight	193
More than a fortnight and less than a month	223
„ one month and less than three	548
„ three months and less than six	307
„ six months and less than one year	275
„ one year	474

It will be deemed a moderate computation if I suppose that, out of the 1827 children more permanently supported in the workhouses of Norfolk and Suffolk, 180 would have to be annually apprenticed, if the children were not prepared by careful training for the discharge of their duties in after life.

In the Samford Hundred alone, containing only 11,000 inhabitants, 33 children were apprenticed annually for a series of 16 years at an average premium of about 10*l.* each.

The subjoined Tables shew some of the more prominent features of this system, and the annual amount of the incidental expenses, including the premiums.

SAMFORD HUNDRED, SUFFOLK.

Years ending March 25th.	Amount expended in apprenticing and placing out Children and Servants, including all Incidental Expenses.			Amount of Parts of Premiums received from Parishes.			Balance paid from the Hundred Funds.			Amount of Expenses for Relief of the Poor.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
1825	654	5	2	262	19	3	391	5	11	5,803	18	3
1826	664	1	6	159	0	0	505	1	6	5,604	12	3
1827	482	15	11	139	15	0	343	0	11	5,523	16	7
1828	590	1	3	128	19	0	461	2	3	5,565	17	7
1829	722	9	1	152	6	6	570	2	7	5,219	8	2
1830	912	4	11	308	5	0	603	19	11	5,506	15	8
1831	556	11	6	109	0	0	447	11	6	5,283	9	8
1832	544	9	6	102	10	0	441	19	6	5,160	7	11½
1833	481	5	6	209	10	0	271	15	6	5,325	18	10
1834	546	1	10	111	0	0	435	1	10	4,905	6	11
1835	391	10	6	24	10	0	367	0	6	4,520	3	3
1836	436	10	0	157	0	0	279	10	0	3,661	10	6½
Total .	6,982	6	8	.	.	.	.	.	.	62,081	5	8½

SAMFORD HUNDRED, SUFFOLK.

Return of the Number of Children Admitted, also of the Number who have been Discharged, Apprenticed, Placed in Service, or have Died, during Seven Years, ending 25th March, 1837.

CLASSES.	Admitted.	Discharged.	Apprenticed.	Placed in Service.	Died.
1st.—Children of Able-bodied Men in Employment .	271	183	101	25	1
2d.—Children of Able-bodied Widows	43	23	21	3	3
3d.—Children whose Parents were Disabled	69	33	9	3	4
4th.—Orphans	39	12	25	10	2
5th.—Deserted Children	14	4	..	5	..
6th.—Children of Convicts	22	2	15	5	1
Total	458	257	171	51	11
Average	66	36	24	7	1½

If, therefore, 180 children were apprenticed from the present workhouses of Norfolk and Suffolk every year, 4680, or, in round numbers, 4600 children would have to be apprenticed annually in England and Wales at an expense of 46,000*l.* per annum for premiums only, at the lowest estimate, without including any incidental expenses,

This charge could only be regarded as the final expense attending a neglect of the industrial and moral training of the children, upon the assumption that the future dependence of these children would be *averted* by their apprenticeship, a consequence which is contrary to all previously ascertained facts. Even if this preliminary expense were incurred, and the apprenticeship of the children were conducted with much greater care and skill than it formerly was under the management of parishes or incorporations, a large number of the children whose training had been neglected up to the period of their apprenticeship would be found so ignorant, idle, and vicious, that the efforts of the best master would be vainly exerted for their reformation, and they would sooner or later become a disgrace and burden to the country, either in its gaols or in its workhouses.

The extent to which the mischievous system of compulsory apprenticeship had been adopted in the incorporations of the counties of Norfolk and Suffolk alone, (in consequence of the absence of a correct system of religious, moral, and industrial training within the workhouses,) is exhibited in the following Tables, which are selected from others showing similar results in the other incorporations of the same counties.

SAMFORD HUNDRED.

Years.	Bound into large Towns out of the Hundred.	Number of Years for all.	Premiums.	Bound into rural Districts out of the Hundred.	Number of Years.	Premiums.
			£. s. d.			£. s. d.
1820	7	27	63 0 0	3	20	15 0 0
1821	9	37	90 0 0	4	16	30 0 0
1822	10	38	92 0 0	7	35	45 0 0
1823	23	101	281 0 0	7	26	67 0 0
1824	28	124	278 0 0	12	59	123 0 0
1825	32	156	375 0 0	5	26	65 0 0
1826	22	123	222 0 0	5	32	58 0 0
1827	24	105	259 0 0	6	30	57 0 0
1828	21	108	234 0 0	7	39	76 0 0
1829	44	234	476 0 0	13	87	132 0 0
1830	23	119	256 0 0	8	68	94 0 0
1831	22	108	229 0 0	4	26	44 0 0
1832	34	152	383 0 0	4	18	42 0 0
1833	19	99	201 0 0	3	19	41 0 0
1834	13	72	162 0 0	..	..	..
1835	15	78	164 0 0	7	43	55 0 0

346 Bound into large Towns.

96 " " rural Districts out of the Hundred.

And 59 " within the Hundred.

In all 500, averaging 33½ yearly.

WANGFORD HUNDRED.

Years.	Number of Children Bound.	Premiums Given.			Penalties Paid.		
		£.	s.	d.	£.	s.	d.
1824	85	320	0	0	230	0	0
1825	63	340	0	0	220	0	0
1826	73	340	0	0	230	0	0
1827	74	360	0	0	260	0	0
1828	74	350	0	0	230	0	0
1829	45	210	0	0	160	0	0
1830	70	.	.	.	200	0	0
1831	93	.	.	.	340	0	0
1832	59	379	15	0	313	10	0
Total	636	2,299	15	0	2,183	10	0

COLNEIS AND CARLFORD HUNDREDS.

Years.	Apprentices Bound in the Hundreds.	Amount of Fines Paid.			Apprentices Bound out of the Hundreds.	Premiums Given.		
		£.	s.	d.		£.	s.	d.
1821	75	230	0	0	2	30	0	0
1822	70	170	0	0	2	23	0	0
1823	59	140	0	0	7	95	16	0
1824	47	120	0	0	..	..	..	..
1825	30	100	0	0	4	55	0	0
1826	38	90	0	0	3	45	0	0
1827	44	70	0	0	9	103	10	0
1828	27	70	0	0	2	24	0	0
1829	41	200	0	0	1	16	0	0
1830	41	170	0	0	6	79	0	0
1831	50	250	0	0	10	137	0	0
1832	21	70	0	0	3	38	0	0
1833	23	110	0	0	1	10	0	0
1834	21	40	0	0	2	22	0	0

The number of children maintained and educated in the workhouses of Norfolk and Suffolk is considerably less than in some other parts of England. Thus I am aware that the workhouse schools in the county of Kent contain a much greater number of children in proportion to the population; but on the other hand, in the north of England a smaller number of children will probably be found to be dependent on the rate-payers.

If the children maintained in the workhouses of the rest of England be admitted to bear the same proportion to the population as in Norfolk and Suffolk, the workhouses of England contain 49,556 children between the ages of 2 and 16, of whom 48,022 are more permanently resident in the workhouses.

If the want of classification and the absence of correct discipline which

prevailed in the old workhouses continued in the new, a great number of these latter children would acquire the habits of hereditary paupers, or even of felons, and *if only one-tenth of them (which would by no means be improbable,) became dependent during six months of each year, with families of the ordinary size, they would occasion a burden of 112,353*l.* per annum.*

The reader will not be insensible to any consideration which could influence the mind of a moralist in calculating the effects of different systems of training on the probable future destiny of 48,022 children, and such considerations are inseparably connected with a comprehensive view of the means adapted to procure the cessation of the dependence of these children on the rate-payers at the earliest period. The outlay attending the maintenance of the pauperised classes is, however, a useful, though by no means a perfect, measure of the extent and quality of the moral evils incident upon the existence of pauperism.

I therefore proceed to enquire what legitimate means can be adopted to train these children in such a way as to render their future dependence on the rate-payers improbable. In discussing this question, it will be more convenient to consider—

1. Whether the general arrangements for the maintenance of children in workhouses could be improved, before deciding,

2. What methods should be adopted respecting

A. The industrial training of the children.

B. The methods of instruction and moral discipline.

C. Extent of secular instruction.

D. Religious instruction.

When these subjects have been considered in relation to a proposed improvement in the general management,

3. The applicability of the principles thus evolved to existing managements in Union workhouses will be determined.

The establishment of two County Schools of Industry in each of the counties of Norfolk and Suffolk appears to be rendered desirable by various important considerations.

The number of orphans maintained in each Union workhouse throughout these counties is not sufficient to afford an opportunity for correct classification, so as to conduct the general and industrial instruction of the children, on such a system and by such methods in each workhouse-school, as to procure the largest amount of benefit from a careful training of the children. The children of able-bodied labourers, for the most part, are received into the workhouses with their parents, who seek only a temporary refuge there, and their period of residence is so short that the children rather disturb the routine of school-arrangements adopted in the workhouses, than, by their numbers, increase the efficiency of the system adopted.

The industrial training of the children who have no natural guardians, and who are therefore altogether dependent on the Board of Guardians for instruction in the practical duties of life, is thus impaired by two circumstances, which would cease to exist provided such children were sent to a county-school.

The classification of the children separately from the adults (excepting their parents) is preserved with care in the workhouses of Norfolk and Suffolk, but cannot be rendered perfect in any workhouse as at present regulated. The adult paupers maintained in workhouses are generally persons of confirmed pauper habits, from whose society the children could acquire nothing but evil.

Children should not be taught to consider themselves paupers; and this result can scarcely be avoided if those who have lost their natural guardians are trained in a workhouse, under the same roof, and in unavoidable contact, with paupers. This stigma, and the consequent loss of self-esteem, would be entirely removed if the children were taught at a central school, with other children not received from the workhouses, nor the offspring of pauper parents.

When the whole arrangements for the Unions of Norfolk and Suffolk are completed, those counties will contain 39 Unions, or Incorporations, for the workhouses of which it will be necessary to provide efficient teachers of both sexes. Good teachers could not be supplied to the workhouses at lower salaries than 35*l.* per annum for a schoolmaster, and 20*l.* for a schoolmistress, with separate apartments and board. A combination of Unions for the support of a common school for the instruction of the children who have lost their natural guardians, would enable the Boards to provide the most efficient schoolmasters and schoolmistresses, and at the same time to reduce their annual expenditure remarkably. The objections entertained by duly-qualified teachers to a residence in the workhouse would not exist with respect to a central school, separate from all the workhouses.

In 39 workhouses, the cost of the present improved arrangements may be thus estimated.

Lowest salaries at which the efficiency of the schools of 39 workhouses could be maintained:—

	£.	s.	d.
Schoolmaster, 35 <i>l.</i> per annum	1,365	0	0
Schoolmistress, 20 <i>l.</i> per annum	780	0	0
Maintenance of Schoolmaster, at 6 <i>s.</i> per week, } 15 <i>l.</i> 12 <i>s.</i> per annum	608	8	0
Maintenance of Schoolmistress, ditto, ditto	608	8	0
	<hr/>		
	£3,361	16	0

Besides this outlay, a pauper shoemaker and tailor, employed in assisting the schoolmaster, are generally maintained in each workhouse, at a salary of 3*s.* per week each, or 7*l.* 16*s.* per annum each, which, in 39 workhouses, would amount to an additional outlay of 608*l.* 8*s.*

In each of these 39 Unions, at least 50*l.* must also be expended in Bibles, Testaments, Catechisms, Lesson-books, Apparatus, in gardening and carpenter's tools, shoemaker's and tailor's implements, &c. &c., and in fitting up a separate wash-house and laundry for the girls. At the lowest sum, an outlay of 1950*l.* must thus be incurred, and 20*l.* would have to be expended in fitting up the apartments of the schoolmaster and schoolmistress, making a total outlay of 2730*l.*

Many considerable advantages as respects discipline would be secured

by assembling the children, who are now more permanently maintained in the 39 workhouses, in four county-schools, which should each contain 400 or 500 children. These four schools might be provided with the most efficient teachers, &c., for the following annual outlay for salaries and abundant maintenance.

Four schools containing 400 or 500 children each : —

	£.
Four principal Schoolmasters } Salaries 120 <i>l</i>	480
Four principal Schoolmistresses } Maintenance 10 <i>s</i> . per week each	208
Four Assistant Schoolmasters } Salaries 60 <i>l</i>	240
Four Assistant Schoolmistresses } Maintenance 10 <i>s</i> . per week each	208
Four Tailors, wages 10 <i>s</i> . per week	156
Maintenance 5 <i>s</i> . ditto	
Four Shoemakers, ditto ditto	156
Four Laundresses, 15 <i>l</i> . per annum wages	60
Maintenance 5 <i>s</i> . per week	52
	<hr/>
	1560
Four Chaplains, 60 <i>l</i> . per annum	240
	<hr/>
	£ 1800
	<hr/>

Thus a clear saving of 2000*l*. per annum in the salaries and maintenance of officers would be accomplished in the 39 Unions, and the Boards of Guardians would be enabled to obtain efficient teachers by affording sufficient salaries, and more liberal maintenance and accommodation.

I will now proceed to consider, in the first place, what methods should be adopted for the *industrial training* of the children.

The great object to be kept in view in regulating any school for the instruction of the children of the labouring class, is the rearing of hardy and intelligent working men, whose character and habits shall afford the largest amount of security to the property and order of the community. Not only has the training of the children of labourers hitherto been defective, both in the methods of instruction pursued, and because it has been confined within the most meagre limits, but because it has failed to inculcate the great practical lesson for those whose sole dependence for their living is on the labour of their hands, by early habituating them to patient and skilful industry.

An orphan or deserted child, educated from infancy to the age of 12 or 14, in a workhouse, if taught reading, writing and arithmetic only, is generally unfitted for earning his livelihood by labour. Under such a system he would never have been "set to work." He would, therefore, have acquired no skill; he would be effeminate; and, what is worse, the habits of industry, which he might have acquired had he been so fortunate as to live beneath the roof of a frugal and industrious father, would be wanting. He would also be deficient in that manual dexterity by which a well-trained labourer is enabled to increase the comfort of his own household, without an expenditure of his earnings.

The county-school should be surrounded by a garden of six, eight, or ten acres, in which the system of instruction in gardening adopted in Lady Byron's school at Ealing, in the school of the Children's Friend

Society at Hackney Wick, and also by Lord King and others, as originally proposed by De Fellenberg on the Continent, ought to be pursued. The schoolmaster should, at the appointed hours, accompany the boys into the garden, and superintend their instruction in digging, hoeing, planting, and careful gardening. They will thus be initiated in employment closely resembling rural labour, which, if it were only followed by the useful result of enabling them in after-life to cultivate their cottage allotment with greater skill, would be a desirable acquisition. The schoolmaster should be provided with some simple elementary works on gardening, from which some of the oldest boys should read extracts daily to the school, after which the master should ask such questions and make such comments as he may deem desirable to awaken and sustain the attention of the children.

The plans pursued at Ealing Grove School, and some other similar establishments, are described by Mr. Duppa, in a tract which has obtained an extensive circulation. But these plans would require considerable modification in a school containing pauper children. It would not be possible to afford the stimulus of wages for labour on land not allotted to the children, nor could the profits of the allotments be given to children maintained at the expense of the rate-payers in the county-school; but it would be desirable that the land should be divided into allotments among those boys who had acquired a certain amount of skill in gardening, and that a separate account should be kept for each allotment of the quantities and value of seeds and manure, furnished, and of the crops produced, and their value; and the accounts thus rendered should, from time to time, be examined and certified by the master, and compared before the school. When an orphan or deserted child was about to leave the school to go into service, the account of his labour in the garden or elsewhere should be carefully examined before certifying his diligence, and the produce of his allotments and work might be considered in reference to the nature of the outfit granted him on leaving the establishment.

The produce of the children's labour would have a certain value. Thus, for example, the establishment would be altogether supplied with vegetables from the garden cultivated by the boys. It is therefore desirable, before proceeding further, to remark, that the object of setting the children to work is, *not to make a profit of their labour, but to accustom them to patient application to such appropriate work as will be most likely to fit them for the discharge of the duties of that station which they will probably fill in after-life.*

I now proceed to consider what other employment could be usefully taught the child of an agricultural labourer.

Several of the workhouse schools are supplied with carpenter's tools and rough boards. The boys make their wheelbarrows; erect any small outhouses which may be required; fit up their tool-houses; make the desks, forms, and fit up the closets of the school; and do any other rough carpenter's work which may be required in the establishment. They are thus prepared to do any work of a similar description which might be required in ordinary farm service. A husbandman who could weatherboard a barn would be preferred by a farmer, and would probably obtain superior wages. The premises selected by the Children's Friend

Society for their industrial school at Hackney Wick were, when first occupied, in an almost ruinous condition. The dilapidations have been repaired, the breaches have been filled up, and the wood-work renewed, almost solely by the labour of the boys. When I visited the school they were engaged in erecting a new building. At Lady Byron's school at Ealing, some outbuildings, tool-houses, &c., have been erected solely by the labour of the boys. The children have thus acquired a knowledge of the way to make mortar, to set a brick, to saw and plane a piece of wood, to drive a nail in a workman-like manner; all which skill cannot fail to be useful to them as farm servants, or in repairing dilapidations in their own cottages.

The guardians of certain of the rural Unions consider it desirable that the children should learn to make a hurdle, an osier or a 'frail' basket, or a net; and such arts may be taught by procuring the attendance of an artisan during a certain portion of the day, twice or thrice weekly, until the schoolmaster and the children have acquired sufficient skill to pursue their employment without such assistance.

Some other employments might be taught with a view to enable the future agricultural labourer to contribute to the comfort of his household without an expenditure of his earnings. Thus the whole of the boys' clothes of the establishment should be patched and mended by them, and a certain portion of their clothes at least might be made by the boys, even if it were considered undesirable to rear any of them to the employment of a tailor. In the same way, the whole of the shoes worn in the house should be mended by the boys; and if it were considered desirable to train certain of the boys to earn their livelihood as shoemakers, perhaps a large portion, if not all the shoes used, might be made by them. Neither of these trades should, however, be further pursued than, upon a careful consideration, may be thought desirable; first, to train a few children as tailors or shoemakers; or, secondly, to give the rest of the children sufficient skill to contribute, without expense, to the comfort of their households. The hope of profit ought not to induce the guardians to allow these employments to be pursued to the exclusion of others more appropriate to the future situation of an agricultural labourer.

The boys are also employed in the workhouses in platting straw hats, making straw mattresses, whitewashing the walls whenever necessary, in cleaning out their rooms, lighting the fires, &c. The domestic management of the house affords opportunities of instructing the boys in cleaning knives and forks, shoes, windows, &c., and at the weekly meeting of the guardians, the oldest lads are most usefully employed in receiving and taking charge of the horses, when they are taught to wipe and clean the bridles and saddles, to take them off and put them on, to clean whatever gigs or chaises are in the coach-house, and afterwards to clean the stables, make up the bedding for other horses, &c. They are on such occasions required to manifest to the guardians the habits of prompt attention, which the master is directed to inculcate.

The employments adopted in similar establishments in the manufacturing districts would, of course, bear a relation to the employment of the neighbourhood, similar to that which the above-mentioned occupations have to the pursuits of an agricultural labourer.

The domestic management of the establishment will afford considerable facility for the industrial instruction of the girls. The whole of the domestic arrangements should be made subservient to the training of the girls in all the arts of household service. For this purpose, they should be divided into classes, which should be successively employed during such periods as may be found convenient in every part of the household duty. Thus, one class of girls would be engaged in scouring the floors, lighting the fires, making the beds in the several wards; another class would be employed in the wash-house in their turn, where all the clothes of the establishment should be washed; a third class would, in rotation, work in the laundry; and among the officers of the establishment it would be desirable to have a laundress, to superintend the girls employed in washing, ironing, and making up the clothes.

A separate establishment for children would enable the Poor Law Commissioners to regulate the dietary used in the county-school in such a way as to assist the schoolmistress in affording the children valuable instruction in such frugal cookery as it would be desirable that the wife of a labouring man should know. Books treating on this subject should be provided for the use of the school, and the reading and explanation of them should form a part of its regular routine; while the oldest girls should be employed in rotation in the kitchen, under the superintendence of the schoolmistress, in learning to cook such food as the wages of a labourer could ordinarily supply, so as to ensure the most economical management of his means. The whole of the other duties of the kitchen and scullery should likewise be performed by the girls. A portion of every day would of course be devoted to the ordinary instruction in knitting and sewing, but the children should likewise be taught to cut out and make their clothes. No part of service is of greater importance than a proper attendance on the sick; and cases may occur in the school where the older girls may be employed, not to supersede, but to aid the proper nurses in attendance on the sick, under the direction of the medical officer. From time to time the girls might be employed in weeding and hoeing in the garden, as a means of instructing them in the out-door employments of females in rural districts. They might also learn to wait upon the schoolmasters and schoolmistresses.

The success which has attended the efforts of the Children's Friend Society to reclaim juvenile offenders, by the adoption of a similar system of industrial training in their establishments at the Brenton Asylum, Hackney Wick, and the Victoria Asylum, Chiswick, would warrant its adoption in a county-school, or throughout the ordinary Union work-houses of England and Wales; and without such instruction it is evident that whatever other system of training is adopted, the education of the pauper children can afford no effectual guarantee for their future independent subsistence by the wages of industry.

The advantages of industrial training in the formation of correct moral habits are susceptible of some illustration from the results known to arise from the more constant employment of the population since the introduction of the Poor Law Amendment Act. The great decrease in the number of persons committed for and convicted of misdemeanors in Norfolk and Suffolk since the introduction of the Law is shewn in the

subjoined Table of results obtained from the officers of the county prisons.

YEARS.	Felonies.		Misdemeanors.	
	Committed.	Convicted.	Committed.	Convicted.
1832	954	685	1,948	1,904
1833	912	609	2,101	2,037
1834	959	658	2,385	2,339
1835	877	609	2,159	2,106
1836	1,007	697	1,869	1,839
1837	915	634	1,431	1,418

Exhibiting a decrease of 27 per cent. on the average of committals during the last two years, in comparison with the two preceding; and of 31 per cent. on the last year, in comparison with the average of the preceding five.

A system of industrial instruction like that proposed to be pursued in the workhouse schools is now in operation in the orphan establishments, and in the institutions for the correction of juvenile offenders, in Holland, as well as in certain of the *Maisons de Travail* of Belgium; and having recently visited some of these institutions, I purpose to give a very brief sketch of one or two of the most remarkable, before proceeding to consider the other subjects connected with this question.

The Progress of the Nation, in its various Social and Economical Relations, from the beginning of the Nineteenth Century to the Present Time. By G. R. PORTER, Esq. F.R.S., Sections III. and IV., INTERCHANGE; and REVENUE AND EXPENDITURE, 12mo., pp. 367, London, 1838.

THIS is the second volume of a work intended to exhibit the progress of the social and material interests of the British Empire in all their various relations. Each volume, and each section, is complete in itself. The first volume, which contains the sections on POPULATION and PRODUCTION, soon reached a second edition. The motives which induced Mr. Porter to make the commencement of the present century his starting-point are evident. Although the national interests were constantly advancing from the termination of the American War to the close of the eighteenth century, yet the progress was gradual; and it is only within the last forty years that the energies of the country, in war, but still more in peace, have been developed to a gigantic extent altogether unprecedented, and which would have been regarded as incredible by the last generation. It is also within the same period that some of the more important branches of national industry, in consequence of their alliance with automatic machinery, have modified to a great extent the whole current of social life. This occasions the task of tracing the national progress to be more arduous, but at the same time doubly interesting. The Legislative Union with Ireland on the first day of the century renders the investigation from that point unbroken and

more uniform; and, besides, had an antecedent date been chosen, the treasure of statistical materials being less rich, many important points would have been left to conjecture instead of being illustrated by authentic documents. In Mr. Porter's volumes there is no unworthy attempt to marshal and combine figures with a view of strengthening any class of opinions. It must not, however, be supposed that the work is made up of dry statements or tables of figures. The latter are given wherever they are necessary, and embrace accounts and abstracts which must be sought for in many hundred volumes and scattered documents not generally accessible. These are the materials for a history of the national progress, but not the history itself, which forms a continuous narrative under each section, embracing and classifying the several points which indicate the sources and mark the development of the wealth and power of the nation.

Section III. (INTERCHANGE), with which the present volume commences, is divided into sixteen chapters, in each of which a distinct branch of the subject is treated according to its importance. In one or two instances, as in Chapters X. and XI., a department of the subject is further illustrated by a reference to other countries. By this means more enlarged views are obtained than if a stricter limit had been observed. Every chapter contains some materials, without which it is impossible to form a sound judgment on many important questions of general interest. Concentrated in a compact form, and distributed under heads, they cannot but have a considerable effect in enlightening and correcting men's views. We shall pass each chapter rapidly in review.

In Chapter I., on *Internal Communication*, the facilities of transport in Great Britain and the commercial advantages derived from them are briefly pointed out.

Chapter II. relates to *Turnpike-roads*, and contains the following curious estimate, though confessedly only an approximation, of the number of travellers by stage-coaches in England.

"Upon making a calculation" (by a method previously pointed out) "on the whole number of stage-coaches that possessed licenses at the end of the year 1834, it appears that the means of conveyance thus provided for travelling are equivalent to the conveyance during the year of one person, for the distance of 597,159,420 miles, or more than six times the distance between the earth and the sun. Observation has shewn that the degree in which the public avail themselves of the accommodation thus provided is in the proportion of 9 to 15, or $\frac{3}{5}$ ths of its utmost extent. Following this proportion, the sum of all the travelling by stage-coaches in Great Britain may be represented by 358,295,652 miles: if we exclude from the calculation all very young children as well as persons who from their great age and bodily infirmities are unable to travel, there will probably remain in England 10,000,000 of persons by whom that amount of travelling might be accomplished; but it is well known that a very large proportion of the population are not placed in circumstances that require them to travel, and, if even it were otherwise, that they would not avail themselves of a mode of conveyance so comparatively costly as a stage-coach. We shall probably go to the utmost extent in assuming that not more than $\frac{1}{3}$ th, or 2,000,000 of persons, travel in that manner; and it places in a strong point of view the activity which pervades this country when we thus arrive at the conclusion

that each of those persons must on the average travel on land by some public conveyance 180 miles in the course of the year. This calculation is exclusive of all travelling in post-chaises, in private carriages, and by steam-vessels, the amount of which there are not any means for estimating. It affords a good measure of the relative importance of the metropolis to the remainder of the country, that, of the number of 597,159,420 miles travelled over by passengers in each year, the large proportion of 409,052,644 is the product of stage-coaches which are licensed to run from London to various parts of the kingdom."

Chapter III. (*Canals*) includes a notice of inland navigation generally. The canals opened in the United Kingdom since 1800 are 536 $\frac{1}{2}$ miles in length, and include the Caledonian Canal, the most magnificent work of the kind in the country. In France, the construction of canals has been most active in the present century, while in England more than three-fourths of the mileage of the canals was completed before its commencement.

"The navigable canals used for the transport of goods and produce in England alone are estimated now to exceed 2,200 miles in length, while the navigable rivers exceed 1800 miles, making together more than 4000 miles of inland navigation, the greatest part of which has been created or rendered available during the last 80 years. * * * The whole extent of navigable canals at this moment available in Ireland does not amount to 300 miles, and, including navigable rivers, the entire water communication does not exceed 400 miles for the whole island."

In Chapter IV. a complete account is given of the progress of *Steam Navigation*. Twenty years ago, in 1818, the number of steam-vessels belonging to the United Kingdom was only 19, while in 1836, there were 554 belonging to its various ports. In 1819, only four steam-vessels were built and registered, averaging 100 tons each, and in 1836 there were registered 86, averaging 127 tons each. The number arriving at, and departing from, the various ports of the United Kingdom in 1833, including their repeated voyages, was 25,705. The time occupied in a voyage by a steam-vessel may now be calculated with something like the same certainty as the mail-coach, while it is more economical; and yet steam-boats seem to have increased rather than to have diminished the numbers of those who travel by stage-coaches. Mr. Porter remarks:—"The number of passengers conveyed between London and Gravesend by packets, in 1835, was ascertained by the collector of the pier-dues at the latter town to have been 670,452. * * * It was stated in evidence before a committee of the House of Commons, in 1836, that at least 1,057,000 passengers, including those to and from Gravesend, pass Blackwall in steam-vessels every year. * * * The number of passengers conveyed by the Hull and Selby steam-packets in the twelve months which preceded the opening of the Leeds and Selby railway was 33,882, whereas, in the twelve months that followed that event, the number conveyed was 62,105."

A notice of the extent to which steam-navigation is at present available in our intercourse with India, and the prospects of its extension in that and other directions, concludes the Chapter.

Chapter V. relates to *Railways*, and contains a notice of their earliest employment in England, an account of the number of Railway Acts passed since 1800, and a list of completed lines, with observations

on the operation of these new media of interchange. It appears that not only do they facilitate personal intercourse, but create new relations, which give increased activity to correspondence by letter. Mr. Porter states that "since the opening of the railway between Liverpool and Manchester, the deliveries of letters are as frequent and as rapid as the deliveries by the twopenny post between the opposite ends of London." The economical effect of the Liverpool and Manchester Railway, measured in money alone, amounts to nearly a quarter of a million sterling annually; but the saving of time, the facility of transacting business with greater dispatch, and other important considerations, are perhaps of equal value. A table is given shewing the parliamentary expenses incurred in obtaining Acts of Incorporation for some of the principal railway companies. The cost for eight different railways was 303,273*l.* 7*s.* 6*d.*, being a tax on some of them of about 700*l.* per mile. Many other charges, and particularly the cost of land, are proportionably heavy. Hence, the fares by the Belgian and foreign railways do not justly admit of a comparison with the railway fares in this country, as the expense is so much smaller under every head. The railway between Brussels and Antwerp, twenty-seven miles, was constructed at an expense of less than 5000*l.* per mile; and passengers are conveyed from the one place to the other in an hour and a half for 10*d.*, the fare having previously been from 2*s.* 6*d.* to 4*s.* by the ordinary mode of travelling. In 1836 there were 1003½ miles of railway in operation in the United States, and it is stated that nearly two hundred companies have been formed for the construction of 3000 miles more.

Chapter VI. (*Coasting Trade*) contains the tables of tonnage employed in this branch of commerce since 1824, before which time no record was kept of its operations. The amount of tonnage engaged in the conveyance of coal forms a most important portion of the traffic coastways; and it appears that in 1836 there were brought into the port of London 2,398,358 tons of coal, in 8,162 ships. In the years in which a large importation of foreign grain occurs the coasting trade is diminished, as the foreign supply is brought to the different ports for consumption—a fact which Mr. Porter observes will account for the fluctuations of certain years, the trade between different ports on the English coast being less active, while that between Great Britain and Ireland derives a stimulus from the scarcity of the grain market.

Chapter VII. is on the *Trade between Great Britain and Ireland*. In 1825 the imports into Ireland from Great Britain amounted to 7,048,936*l.*, and the exports from Ireland to Great Britain to 8,531,355*l.* Since that period the trade between these parts of the empire has been placed on the same footing as the coasting traffic, and no separate accounts have been kept of the value of produce conveyed, with the single exception of grain, which is still entered at the custom-houses. Some idea, however, of its progress may be drawn from a statement of the ships and tonnage engaged in the trade, an account of which is still kept. Mr. Porter shews that the increase of tonnage from 1801 to 1826 was 62 per cent., and from 1826 to 1836 the increase was 95 per cent.; the rate of increase in the first period of twenty-six years being 2½ per cent., and in the last ten years 9½ per cent. annually. This great increase is attributable, in no small degree, to the employment of steam-vessels, which has placed the Irish occupier in close contact with the English

market, and has had the effect of stimulating industry, and improving every department of husbandry.

Chapter VIII. (*Weights and Measures*) forms a necessary subdivision of the present section.

Chapter IX., on *Foreign Commerce*, is perhaps the most valuable in the volume. There is greater scope for observation, and hence the matter is more varied. The tables are numerous and highly important, and the remarks on our commercial policy, to which they naturally lead, are able and temperately expressed. We quote a few statements of facts, which are placed in a bold and striking light by lucid arrangement.

"The average annual exports of British produce and manufactures in the decennary period from 1801 to 1810 amounted to 40,737,970*l*. In the next ten years, from 1811 to 1820, the annual average was 41,484,461*l*.; from 1821 to 1830, the annual average fell to 36,597,623*l*. Since that time the amount has been progressively advancing, and in 1836 exceeded by 1,765,543*l*. the amount in 1815, the first year of the peace, which, with the exception of 1836, was the greatest year of export trade, judging from the value of the shipments, that this country has ever seen. * * * * * The average annual exports to the whole of Europe were less in value by nearly 20 per cent. in the five years from 1832 to 1836 than they were in the five years that followed the close of the war; and it affords strong evidence of the unsatisfactory footing upon which our trading regulations with Europe are established, that our exports to the United States of America, which, with their population of only twelve millions, are removed to a distance from us of 3,000 miles across the Atlantic, have amounted to more than one-half of the value of our shipments to the whole of Europe, with a population fifteen times as great as that of the United States, and with an abundance of productions suited to our wants, which they are naturally desirous of exchanging for the products of our mines and looms."

This section contains several tables, which lead to some valuable and satisfactory deductions, illustrating the present condition of the shipping interest. It is shewn that, between the years 1821 and 1835, the British shipping which entered the ports of the United States had increased 860 per cent., while the increase on American shipping was only 77 per cent.; or, to state it differently, the proportion of British shipping, compared with the American tonnage employed in the foreign trade of the States, was only $7\frac{1}{2}$ in 1821, while in 1835 it had increased to 39 per cent. Again, comparing the British and foreign tonnage that entered the ports of the United Kingdom in the same years, the proportion of foreign was 27 per cent. in 1821, and not more than $35\frac{1}{2}$ per cent. in 1836; but in the ports of the United States of America the foreign tonnage which entered their ports had increased from 10·65 per cent. in 1821 to 47·42 per cent. in 1835. A table is also given which shews that "the proportion of foreign to British tonnage which entered our ports during that period, which is regarded as the most prosperous period in the annals of the mercantile marine, was far greater than it is at present." In 1810 the proportion per 100 tons British was 131·27 tons foreign. Mr. Porter further shews that the shipping which entered and left our ports in 1836 was more than twice as large as that employed in 1802. Taking periods of five years each from 1814, the average tonnage employed from that year to 1818 was 4,147,257 annually; from 1819 to 1823 the average

was slightly increased, and amounted for each year to 4,200,332 tons; from 1824 (the year in which the first Reciprocity Treaty was concluded) to 1828, the annual average was 5,332,122 tons; and in the five years, from 1832 to 1836, 6,326,508 tons. The same progress is to be traced in the number of ships built and registered in the United Kingdom.

Chapter X. affords a contrast of the *Progress of Trade in Foreign Countries*, but more particularly in France and the United States, with that of this country.

Chapter XI. completes the notice of Foreign Commerce, by an account of the *Prussian Commercial League*, which came into operation in 1834. Its proceedings are naturally watched with great interest by the manufacturers of this country. The League has been joined by ten independent States, whose territory extends over 174,627 English square miles, with a population of 25,153,847. Mr. Porter gives the following account of the first operations and more immediate objects of this great Union:—

“The principle of the Commercial League is to destroy all the frontier custom-houses between the leagued States; to allow of the freest intercourse between the subjects of all the different States composing the Union; and thus to give to the inhabitants of each the fullest advantage to be derived from a community of interest, and from extending, in a most important degree, their markets for supply, and the field for the exercise of their industry. Duties on the introduction of merchandise from countries not comprised within the Union have, since the 1st of January, 1834, been collected at one uniform rate at custom-houses established on the exterior boundaries of the frontier States; and a principle for dividing the amount of the duties thus collected has been adopted between the Governments, without any consideration as to which is the country for whose immediate use the importations are intended, or to any circumstance other than the proportionate amount of population.”

The motives which have induced so many independent States to join the Prussian League, and its effect in those States in which industry is devoted to manufactures, are next considered. As to the interests of those countries which do not belong to the Union, Mr. Porter says:—“It is probable that the full effects of the Union in discouraging the importation of foreign manufactured goods has not yet been experienced.” He gives a table, from which it appears that the shipment of British produce and manufactures to all Germany, from 1827 to 1836, averaged 4,646,862*l.* annually, and in the three years subsequently to the formation of the League, 4,690,760*l.* In Saxony, the League has already had a considerable effect in stimulating manufacturing industry, and, not content with the gradual accumulation of capital, the manufacturers are obtaining resources for an enlargement of their operations by the aid of joint-stock associations.

Chapter XII., on the *Currency*, reviews all the great features of our policy on that question within the century. A scheme for determining, at any time, whether prices are rising or falling, and to ascertain the degree of such fluctuation, as an index to the state of the currency, with an illustrative table, will be found in this chapter.

Chapter XIII. (*Coinage*) completes the subject of the Currency.

Chapter XIV., on *Wages*, which should perhaps have been placed in

connection with Section II. (*PRODUCTION*), contains interesting tables of the wages of labourers and artisans in each of the three kingdoms, and an estimate of their condition during the period embraced in this work.

Chapter XV. on the *Measurement and Classing of Shipping*; and XVI., on the *Warehousing System*, complete the Section.

In Section IV. (*PUBLIC REVENUE and EXPENDITURE*), Chapter I. is devoted to a view of the *Financial State of the Kingdom at the Beginning of the Present Century*.

Chapter II., under the head of *Public Income and Expenditure*, shews the gigantic efforts which this country made during the war, and the consequent exhaustion experienced during the first few years of peace.

Chapter III. (*Produce of Taxes*), contains tables of taxes imposed and repealed between 1800 and 1836; and tables of the produce of taxes in proportion to population. Much still remains to be done towards placing our fiscal system on a more intelligent and enlightened basis. Of this we may quote two proofs. The revenue derived from the Post-Office was deficient in 1836, at the rate of 25 per cent., as compared with its productiveness in 1801, and with reference to the increased population. The net amount of Customs duties received in 1836, upon the 190 articles enumerated in the tariff, was 22,774,991*l.*, of which 21,488,162*l.*, or 91½ per cent., was collected on 18 articles, and 22,376,869*l.*, or 98½ per cent. on 45 articles.

Chapter IV., on *War Expenditure*, is probably one of the most instructive in the volume, abounding in startling facts, from which we select a few of the most striking. During the ten years, between 1805 and 1814, the Government expenditure exceeded *eight hundred millions sterling!* In the course of the war 46,289,459*l.* was paid in subsidies and loans to foreign countries, as appears by the public accounts, though this amount is below the actual sum. During the present century the national defence has cost upwards of 1000 millions sterling; 63 per cent. of which is shewn to have been expended in the fourteen years from 1800 to 1814; and the remainder, 37 per cent., in the twenty-two years of peace. The average annual expenditure under the heads of Navy, Army, and Ordnance, for the six years ending 1836, was 12,714,289*l.*; and in the six years from 1809 to 1814 the expenditure under these heads averaged each year, 58,092,906*l.*

The last three Chapters are—V. *Miscellaneous Estimates*; VI. *Public Expenditure of France and America*; VII. *County and Parochial Expenditure*.

We hope that the remaining part of Mr. Porter's work will be published without much delay. The whole will form a compendious and valuable library of British Statistics.

Report of an Enquiry, conducted from House to House, into the State of 176 Families in Miles Platting, within the borough of Manchester, in 1837. By JAMES HEYWOOD, Esq. Read before the Statistical Society of London, on the 16th April, 1838.

THE following Report has been prepared from the results of an enquiry undertaken at the request of the author, in a district of Manchester, with which the visitor who conducted the enquiry was previously well acquainted. Miles Platting is inhabited, for the most part, by the families of operatives, who are dependent upon manual labour for their subsistence; and a large proportion of the heads of the families included within this enquiry are hand-loom weavers. Their occupations are extremely laborious, their earnings very moderate, and their time of labour, when in full work, often amount to 14 hours per day. During the year 1837 many of the hand-loom weavers in this district did not find half employment; others were unable to earn more than 6s. or 7s. per week, and the most experienced and industrious of the class, by working 14 hours per day, frequently obtained for the full amount of their earnings only 12s. per week.

Where the hand-loom weavers are employed in weaving plain thin cotton goods, similar to those manufactured by power-looms, their earnings seldom amount to 9s. per week, and the majority of this class of workmen can only get 6s. or 7s. per week. In weaving narrow shawls, a new kind of work, put out in the winter of 1837, the weekly earnings of a good weaver were 9s. per week, from which 2d. in every shilling, or 1s. 6d. on the gross earnings, must frequently be deducted for the expense of winding, leaving only 7s. 6d. as the net weekly earnings.

A first-rate workman, weaving quiltings, may earn 12s. per week; but, in this case, the winding and other expenses often amount to 3d. in 1s., or 3s. on the gross earnings, and thus their net earnings are diminished to 9s. per week. In like manner a silk-weaver, working at plain sarsonets, may earn 12s. per week; but the expenses of winding and the use of the loom usually amount to 3d. in every shilling, or to 3s. on the whole weekly earnings, and thus the net earnings of the silk-weaver are diminished to 9s. per week. Whenever the hand-loom weaver works at his own loom, and is assisted in winding by his wife or family, he may consider the whole of his earnings as profit; but in the case of journeymen weavers, who hire the looms on which they work, and who pay, in addition, for the expense of winding, the total amount of the earnings will be necessarily lessened by the deduction of these concurrent expenses. The various occupations of the heads of families included within this enquiry are enumerated in the following table:—

102 Hand-loom weavers.	148 Brought forward.
5 Silk weavers, winders, and warpers.	5 Labourers.
3 Small-ware weavers.	1 Carter.
2 Power-loom weavers.	2 Smiths.
8 Warpers and workers in factories.	9 Tradesmen (hatters, joiners, &c.).
1 Jacquard-loom manufacturer.	1 Schoolmaster.
6 Dyers.	1 Designer.
2 Fustian-shearers.	1 Drawer-in of threads for the loom.
5 Warehousemen.	6 Washerwomen.
3 Bricklayers.	1 No occupation.
11 Colliers.	

Among the heads of families visited the number of married men is remarkable; and the total population of the families included within the enquiry comprehends the following individuals :—

Heads of Families, 147	Married men.
„ „	9 Widowers.
„ „	20 Widows.
—	176
	147 Wives of the heads of families.
	232 Children under 10 years of age.
	239 Children above 10 years of age.
	113 Male lodgers, often journeymen.
	49 Female lodgers.
	34 Children with the lodgers.
Total Population	990

Of the 176 heads of families, 137 are English, 37 Irish, 1 Scotch, and 1 Welch.

It appears that the majority of the children receiving education are instructed in Sunday-schools; and it is worthy of notice that many of the children attend the Sunday-school at a very early age in Miles Platting, owing to the unwillingness of their parents to allow the elder children to attend the Sunday-school unless they take the younger children with them. Of course the maintenance of silence and order in the Sunday-school is rendered more difficult by the presence of a large number of infant scholars in the same room with the older children; and the attention of the more advanced scholars must be diverted by the process of elementary instruction which is required for the infant children.

The total number of children in the families visited is 505, viz.—

232 Children under 10 years of age,
239 Children above 10 years of age,
34 Children with the lodgers.

505

Of this number—

63 attend both day and Sunday-schools,
208 attend Sunday-schools only,
8 attend day-schools only,
9 attend infant-schools,

Making a total of 233 children at school.

There are very few of the heads of the families, included within this enquiry, who have formed the habit of reading, or are capable of understanding or enjoying a book. Many are either too illiterate, or too deeply sunk in indifference, or in animal gratification, to be easily convinced of the importance of mental culture or religion. There are, however, others who may be regarded as sincerely religious characters.

In the following table, where the heads of families are really in connection with the Church of England, or with any other religious denomination, they are classified accordingly; but wherever they profess no particular attachment to any one Protestant sect, they are considered uncertain. Of 176 heads of families, it appears that—

31 belong to the Church of England.
 23 are Roman Catholics.
 13 Methodists.
 4 Unitarians.
 3 Baptists.
 1 Scotch Presbyterian.
 1 Independent.
 3 Deistical.
 97 Uncertain.

 176

Of the 176 heads of families visited—

35 attend public worship regularly.
 45 occasionally.
 36 seldom.
 60 do not attend public worship.

 176

130 profess to be able to read.
 15 read imperfectly.
 23 cannot read.
 8 are not particularized as to their power of reading.

 176

78 possess a Bible and a Testament.
 2 possess a Bible.
 35 possess a Testament.
 97 possess a Prayer-book, or Hymn-book, or both, in addition
 sometimes to the Bible or Testament.
 36 possess other works, chiefly religious.
 37 possess no books.

Of the 176 habitations which were visited, 165 are houses including many cellars, and 11 are separate cellars. They contain 692 rooms, of which 294 are sleeping-rooms; and it is important to observe that the houses in the district visited are generally kept in good repair, and are more convenient than is often the case with many of the cottages of the poor. The internal condition of the habitations visited is detailed in the following table:—

Of the 176 habitations visited there are—

68 houses or cellars described as neat and comfortable.
 20 are neat.
 34 just comfortable.
 37 uncomfortable, of which 2 are damp as well as uncomfortable.
 9 are wretched.
 8 not specified.

 176

Exact information is communicated, in the foregoing Report, on various subjects, which possess, perhaps, rather local than general interest; but the minute analysis of the internal structure of society appears to the author to constitute the leading object of statistical science; and the investigation of the physical, moral, intellectual, and religious condition of the human race is the chosen occupation of the statistical enquirer.

An Account of Strikes in the Potteries, in the Years 1834 and 1836.

By JOHN BOYLE, Esq. Read before the Statistical Society of London, on the 16th April, 1838.

The Staffordshire Potteries—the principal seat of the Pottery-trade—comprise parts of three parishes, and extend, in their whole length from north to south, a distance of eight miles. There are included within these limits four market-towns, of which Burslem, as being the most ancient in the district, claims the first rank; but Hanley and Shelton, places immediately contiguous to each other, and forming, as it were, but one town, are the most populous.

At the census of 1831, the population of the several towns within the parish of Stoke-upon-Trent was 35,602; the population of the parish of Burslem 12,714; and that of the township of Tunstall, in Wolstanton parish, 3,673; making a total of 51,989: and, if the annual increase be estimated in the same ratio as that from 1821 to 1831, the population in 1836-7, the period of the strike, would be 61,000, all of whom were connected with the Pottery-trade.

All the processes of the manufacture are performed by manual labour, and no machinery, in the ordinary acceptation of the term, is used. Every branch in the trade is healthy, with the exception of that employed in covering the surface of the ware with glaze, or, as it is technically called, “dipping.” The regular working time, on which all calculations of wages are based, is 54 hours per week, or an average of 9 hours per day; but when goods are in great demand, the workmen are often required to make greater exertions, and the time is extended to 66 hours per week, or an average of 11 hours per day.

The Operative Potters, as a body, earn fully as good, if not better, wages than the workmen of any other staple trade in the kingdom; and full employment is afforded at suitable occupations to women and children. In a document published by the Chamber of Commerce previous to the general strike, and extensively circulated throughout the kingdom, there occurs the following remarks on the subject of the earnings of the workmen, and their accuracy has never been disputed:—

“Two or three years ago, when wages were considered low, the weekly average was from 17s. to 21s. for men, according to their skilfulness; 7s. to 9s. for women; and 3s. 6d. to 4s. 6d. for children of 14 years old. The average earnings in regular branches are now from 21s. to 28s. for men; 9s. to 12s. for women; and 4s. to 6s. for children; the labour being calculated at nine hours per day.”

The Operative Potters, in their general character, are industrious and orderly, and possess the luxuries, as well as comforts, of life to a considerable extent. For ten years previous to the strike, wages had been undergoing a progressive advance; caused in part by the operation of the Potters' Union, but more by an uninterrupted demand for goods, which left few or not any skilful hands out of regular employment. At no period since the establishment of the trade was the remuneration for labour so ample, as at the time of the general strike, in November, 1836.

The first Union of the workmen known in the Potteries, for the purpose of regulating prices, was established in 1824. In 1825, the hands at a number of manufactories struck for an advance of prices; but during the continuance of the strike the well-known commercial panic

of that year occurred, which frustrated their endeavours, and work was resumed at the same or lower prices than those previously paid. One of the expedients of the Union at this time was to commence manufacturing, and by thus making the surplus hands a source of profit, it was thought a waste of funds would be prevented, and at the same time the competition for employment would be checked.

After this Union was dissolved, those who had been at its head, or who had actively promoted it, were viewed by the masters as individuals who would on all occasions be ready to excite a spirit of disaffection among their fellow-workmen, and take every opportunity of raising the price of labour. As a consequence, such parties had difficulty in obtaining employment, and some therefore left the district, while others took to different occupations. One of the leading characters of the Union, who had subsequently changed his views on the subject, makes the following remarks in a letter published in July, 1836, previous to the late strike:—

“These simple facts will illustrate the nature of unions—their utter inefficacy—the factious spirit they cherish—the false principles on which they are founded—the materials of which they are ordinarily composed—and the ruinous effects to which they lead. We spent nearly 3000*l.* to prop up a mere fallacious delusion! Labour fell lower than ever in 1826, in consequence of the depression of trade. Many of the men were ruined, and went in at any price. Many, before in comfort, dragged on a miserable existence on parish-pay, having offended their employers beyond forgiveness.”

No more was heard on the subject of union for a considerable period. About 1830, two delegates from the general “*Trades Union*” convened a public meeting, to be held in the open air, at a short distance from the Potteries. These individuals harangued in a strain of great violence; they denounced all the masters, with one exception, as oppressors of their workmen, and exhorted the Potters to form part of a General Union of the operative classes throughout the kingdom, which, according to their representation, would correct all that was amiss in the relations between master and servant, and give to the latter his proper station in society.

A short period after this occurred, and probably consequent upon it, a Union of the Potters was formed; the effects of which were soon felt by some of the smaller manufacturers, who were paying a low rate of wages.

In 1833, Mr. Owen, of New Lanark, visited the Potteries, and encouraged the spirit of union among the workmen. He took every means of advancing his principles, and some of the most active agents of the Union were considered to be his followers.

In 1834, another attempt was made at manufacturing. A manufactory was taken at Burslem, on a lease for a term of years, and seven of the workmen who had accumulated property entered into engagements for the payment of the annual rent. A capital amounting to 800*l.* was advanced from the general fund, and two of the most active members of the Union had the management. This concern struggled through an existence of 18 months; the capital was entirely lost, all parties became dissatisfied with each other, and those connected with the lease were happy at being discharged from their responsibilities on almost any terms.

At this time the demand for goods was remarkably brisk, and the workmen were fully employed. It appeared to the masters a favourable opportunity to respond to the feelings of the workmen, and to make an advance in the price of workmanship. It was thought that such a course would allay the irritation and discontent which generally prevailed towards a certain class of manufacturers. In the Potteries there has always been a great difference in the price paid to workmen for articles of the same description. Some manufacturers give a greater and others a less degree of finish to their goods, according to their standing in home or foreign trades; and it often happens that the workmen at one manufactory earn better wages than those at another where the prices are higher. It was mutually agreed between the masters and workmen that a joint committee, consisting of an equal number of each body, should meet, and determine on a minimum list of workmanship. This committee entered on its duties, and proceeded to effect the object in view; but it was soon brought to a termination by what the masters deemed a violation of faith on the part of the workmen.

The general body of one important branch of the trade refused to sanction the acts of their delegates, and when this was communicated to the committee, the masters would not proceed further in the business. In November, 1834, the end of the Potters' year, the workmen at ten manufactories in Burslem and Tunstall struck for an advance of wages. The advance demanded was an average of 35 per cent. upon the current rate. After the strike had continued for ten weeks, the manufacturers concerned in it convened a meeting of the general body of manufacturers throughout the district, and submitted for their consideration the demands of the workmen, and asked advice as to the course to be pursued.

This meeting decided that an advance to a certain extent ought to be conceded, and appointed a committee of 5 manufacturers, not connected with the pending dispute, to arrange an equitable list of prices. This arrangement was made without the concurrence of the workmen; but as a majority of the members of the committee were among the most respectable in the trade, and known to pay the highest prices for workmanship, and as no complaints were heard from their workmen, it was thought that a list which had received such sanction would be acceptable to the workmen engaged in the strike. The result, however, proved different, and the workmen rejected the revised list, and insisted on their full demands. At the next meeting of the general body of the masters the following resolution was passed:—

“That the meeting feels disappointed that the list of working prices, as revised by this committee and subsequently agreed to by the said manufacturers at Burslem and Tunstall, and by them offered to their workmen, has not been accepted by them, and been productive of an amicable settlement of their differences. That, in order to do away with every reasonable objection to the revised list of prices, and to bring about a permanent settlement of the matters in dispute, this meeting advise that the manufacturers concerned therein propose to the workmen at issue with them, that they select 6 operatives (not being interested parties) to be added to the present committee and Mr. Mayer, making 6 manufacturers and 6 workmen, which united committee shall look over the said list and make whatever alterations they shall deem proper therein.”

On this overture being made to the workmen, the Board of Manage-

ment of the Potters' Union, to whom everything was referred, passed the following resolution :—

February 9th, 1835.

" At a meeting of the Board of Management for the Board of Operative Potters' Society, it was unanimously resolved—The board, having duly considered the resolutions of the manufacturers' meeting, held at the Swan Inn, Hanley, on the 6th inst., find that, notwithstanding all its efforts to bring such meeting to acknowledge a fair principle to legislate upon, has hitherto failed in such efforts. Such being the case, our present conviction is, that it is neither our duty nor privilege to hold any further conference with them on the subject; and at the same time are perfectly satisfied that the prices required by the workmen are just and reasonable, and such as the circumstances of the manufacturers and the country at large will admit."

The whole grounds of dispute now remained in the same state as at the commencement of the strike, nor were they, to all appearances, any nearer a settlement. No farther attempts at compromise were made; but, on the 1st of March, after a stoppage of 15 weeks, the manufactories were opened, and the masters yielded to the demands of the workmen. There is on ordinary occasions a suspension of work for one week at Martinmas, therefore that time must be deducted from a calculation on the general loss.

The number of hands employed by the 10 manufacturers was at least 3,300, and the weekly amount of wages exceeded 1,900*l.* The total loss in wages alone sustained by the workmen may be estimated at 27,000*l.* To this amount must be added the loss sustained by the masters on their dormant capital, the loss to the working colliers, and to the other branches immediately dependent upon the Potters.

The workmen engaged in this contest did not receive that pecuniary aid from their brethren which such a display of fortitude appeared to deserve. In the financial report of the Potters' Union for this year, the amount charged under the head of assistance to the Burslem and Tunstall workmen is only 1,562*l.*; and if it be estimated that 300*l.* was collected from the publicans and shopkeepers in support of the cause, there still remains a loss to the workmen of 25,138*l.* The workmen effected the object for which they struck, and the masters appeared to be powerless. The immediate benefit to the workmen was very great: it extended from 30 to 35 per cent. upon the weekly amount of wages for the same quantity of manufactured goods. And if it be estimated that this advantage continued until the partial strike of September, 1836, a period of 18 months, it would appear that the pecuniary benefit to the workmen at the 10 manufactories would be 41,500*l.* at the lowest rate of calculation; and even after the loss sustained by the workmen in effecting this advance is deducted, there still appears a balance of 26,362*l.* in their favour. It must not, however, be thought that even half of this amount was received by the workmen in addition to the weekly wages they had previously received. The intemperate workmen had so much more time at their command to devote to dissipation. The indolent were better enabled to indulge their habits without diminishing their earnings: and as it was one of the professed objects of the Union to lessen the number of working hours, the best members were expected to show an example in this respect.

Elated with victory, the workmen thought that nothing could withstand their united will. The authorities of the Union assumed to be the

arbiters in everything that related to the workmen and their employers. Whenever an advance was deemed necessary it was demanded, and a few days or hours were given to the masters to express their submission or refusal. If the workmen at some manufactories did not subscribe to the funds to the full extent required, certain indispensable hands were ordered to strike until the refractory members yielded obedience. In some instances where workmen were dismissed for violations of duty, the rest struck until the others were restored to their places. It frequently happened that a master was not allowed to increase the number of hands in a certain department, on the ground that his workmen did not think an addition was required. A new form of agreement, drawn up under the sanction of the Union, was dictated to the masters; the hours of labour were to be diminished, and the number of apprentices, as well as the conditions on which they were to be taken, was regulated by the same authority. The masters found it impossible to comply with these demands, and submit to the course of conduct pursued, without appearing to abandon the general interests of the trade. The jealousy and distrust which proverbially exists among the manufacturers of this district, and which had hitherto prevented all united attempts at resistance, now began to yield.

In March, 1836, the great body of the manufacturers formed themselves into a society, under the designation of a "Chamber of Commerce," the professed object of which was to protect the general interests of the trade, and no subject so urgently claimed their attention as the proceedings of the workmen. In the succeeding month the Chamber issued an address in which it set forth, that to remain inactive any longer would be to encourage the proceedings of the Union, would destroy the control of the manufacturer over his business, and expose him to constant and progressive annoyance.

In order fully to understand all the bearings of the Potters' strike, it is necessary that an explanation should be given on one of the peculiar regulations of the trade, viz., that of annual hiring. It has been usual since the first establishment of the trade, for the workmen to be hired from Martinmas to Martinmas, and when any change was made in prices, or in the conditions of work, it was always made on these occasions. It is urged in defence of this usage, that such is the varied nature of the trade, and so many hands are immediately dependent on each other, that it would be productive of great inconvenience if masters and workmen were allowed to separate at a short notice.

The Chamber found it impossible to effect any beneficial change in the existing state of things until the period arrived when engagements had to be renewed for the following year. Although the workmen had set at nought their contracts, and had triumphantly undergone whatever punishment the law awarded, such a course could not be adopted by the masters, and nothing remained but to wait patiently until a proper period arrived to introduce new regulations. It had clearly appeared that, notwithstanding an agreement to the contrary, the workmen were enabled to effect their object, by causing the hands at any manufactory to strike until their demands were conceded. To counteract this, no other plan presented itself to the Chamber than that of inserting a clause in the agreement whereby the masters, as a body, might be enabled to

suspend their manufactories whenever the workmen of any master struck, in violation of an existing contract. Such a clause was drawn up, under the sanction of the highest legal authority, and the masters determined on its forming part of their agreement.

The contest on the part of the masters was limited to these objects—to maintain the established usages of the trade—to continue the mode of hiring from year to year—and to make an alteration in the form, by adding a protective clause of the nature now explained.

The workmen attempted to alter the system of annual hiring, and to substitute an agreement terminable at a month's notice. They decidedly objected to the protective clause of the masters, under any modification, and determined on abolishing one of the most important regulations of the trade, that of working "good from the oven."

With respect to this mode of work, it is necessary to offer a brief explanation. Two branches of the potting trade, *viz.*, Flat and Hollow ware pressers, are only paid for the work which comes in a perfect state out of the biscuit-oven, and it is assumed that whatever is imperfect, whether from accidental breakage or bad workmanship, is of no value, and is consequently broken. This custom has prevailed for upwards of thirty years, and when it was first commenced an increased price was paid to the workmen, in consideration of the risk incurred by the work undergoing this process. It is urged by the masters, in defence of this usage, that it affords the only feasible check upon the unskilfulness of their workmen; that the loss to the good workman is inconsiderable, and only falls heavily upon the negligent or bad workman: while, under any circumstances, the loss to the master is the greatest, inasmuch as he loses the material and the firing from no fault of his own; while the workman, by whose unskilfulness the loss is occasioned, only loses the price of his labour.

The Potters' Union represented the many abuses that had grown up under the mode of working "good from the oven," and their objections were in part admitted by the masters; but previous to the termination of the strike the system was divested of whatever was objectionable, as far as that could be done with security to the interests of the trade at large.

A certain period of time is always allowed between the termination of an existing engagement and its renewal. This regulation is mutually advantageous; it enables changes to be made either by masters or workmen, without inconvenience to the one, or loss of time to the other. The Chamber fixed the 5th of September as the period when engagements were to be entered into for the following year, which would, as a matter of course, commence on the 11th of November, or Martinmas. The masters expressed their readiness to proceed to the annual hiring, based on the new form of agreement, but those terms were universally rejected. The workmen thought, however, that if the old mode of enforcing their demands were then adopted, the same result would follow, and the hands at 14 manufactories struck work, although they were under agreement to the end of the year. The Chamber of Commerce took the case of these 14 manufacturers into their consideration, and urged them to oppose the proceedings of their workmen. Pecuniary recompense was promised, on a scale proportionate to the

relative extent of their business, until Martinmas, the time when the suspension of the whole body would offer a more formidable resistance. The workmen, week after week, deceived themselves with the hope that the masters would not continue united; that certain individuals among those whose men had struck would soon yield, rather than sacrifice their connections; and that the secession of one would be the signal for the surrender of all the others. No change was made in this state of things until Martinmas, when 64 manufacturers, members of the Chamber, suspended business, as they had previously resolved. Certain masters, inconsiderable in extent of business, yielded, rather than make the sacrifice of suspension; but those who held together, proved sufficient to make an effectual resistance.

The number of hands employed at the 14 manufactories which struck in September, was 3,500, and the weekly payment of wages was, at an average, 2,560*l.* The total loss to the district on this strike may be estimated at 31,168*l.*

The number of hands employed at the 64 manufactories engaged in the general strike was 15,660, and the amount of wages was at an average 11,238*l.* per week. The loss to the whole district on this strike, may be estimated at 157,442*l.* There are in the Potteries 130 manufactories, which employ 20,100 hands, and pay in wages weekly 14,400*l.* It would thus appear that about half the total number of manufacturers were engaged in the strike, but as they were the greatest in extent of business they employed $\frac{2}{3}$ ths of the total number of hands, and paid $\frac{2}{3}$ ths of the whole amount of wages.

On the 28th of January 1837, 21 weeks from the commencement of the strike with the 14 manufactories, and 10 weeks from the general suspension, the men resumed work. The Union did not succeed in any of its objects. The annual hiring was retained, the suspension clause formed part of the agreement, and the "good from oven" system was continued. The extent of suffering was very great, and far beyond anything that had previously been seen in the district. The payments from the Union funds were very irregular, and did not exceed an average of 5*s.* or 6*s.* per week for men with families; while women and children, who form a large proportion of the working population, did not receive any allowance. Every form of appeal was made to the operative classes throughout the whole of the United Kingdom, and the extent to which assistance was afforded may be gathered from the fact that, there is at present owing to the 'Trades' Unions of other towns, the sum of 3,275*l.*, and of this amount there is due to Sheffield alone, 2,084*l.*

The constancy with which privations and distress were endured might call forth admiration, if the object to be attained had been less questionable in policy, or the means employed more justifiable. A few days before the termination of the strike, and at the very period when a great body of the workmen had entered into engagements with the masters, and thus virtually abandoned the Union, a considerable number of individuals, amounting, it is said, to upwards of 200, simultaneously pledged their watches and disposable articles of dress, in aid of the general funds. Many of the more provident workmen who had money in the Savings' Bank of the district, drew it out, either for the supply of

their own necessities, or to assist the Union. Several Friendly Societies, whose members were connected with the strike, advanced on loan the whole or a great portion of their accumulated funds. In many instances the workmen who had been enabled from their savings to build or purchase cottages for themselves, surrendered their deeds in security for the advances of distant Unions. The amount due by the potters to members of their own body for loans advanced or claims withheld is 2,563*l.*, and when to this is added the sum of 3,275*l.*, owing to distant Unions, the total amount of debts to be discharged is 5,838*l.*

No outrage was committed during the strike, either on the person or property of any manufacturer. There were no tumultuous assemblages, nor indications of violence; and, in these respects, due credit must be given to the operative potters. For some time during the strike, if not throughout, many of the manufactories were "picketted," and any individual seen to enter incurred a fine, which was stopped from the succeeding week's allowance. Such a regulation may be necessary in support of a bad cause, but can scarcely be required in one founded on justice. It represses the influence of kindly feeling between the master and workman, and prevents any approach to settlement, excepting through some of the official members of the Union, between whom and the masters there is usually a feeling of bitterness and resentment; and it is certainly a matter for surprise, that men who from their public addresses, appear to understand so well their rights, and who are so sensitive under what is deemed oppression, should submit thus to be controlled in the operation of their own free will and liberty of action.

Financial Statement.

Strike at 14 manufactories, from September 5th to November 14th, 1836, a period of ten weeks. Number of hands employed, 3,500, including men, women, and children of both sexes. Amount paid in wages per week, 2,560*l.*

Loss sustained in wages for ten weeks, at 2,560 <i>l.</i> per week	£ 25,600
„ „ by 45 Crate-makers, earning 22 <i>s.</i>	495
„ „ per week	
„ „ by 270 Colliers, earning 21 <i>s.</i>	2,835
„ „ per week	
„ on rental of 14 manufactories, according to valuation in the parochial surveys	656
„ on interest of capital employed by the 14 manufacturers, estimated at 165,000 <i>l.</i> , at 5 per cent. per annum	1,582
	£31,168

Strike at 64 manufactories, from November 21st, 1836, to January 30th, 1837, a period of ten weeks. Number of hands employed, 15,660, including men, women, and children of both sexes. Amount paid in wages per week, 11,238*l.*

Brought forward	£ 31,168
Loss sustained in wages for ten weeks, at 11,238 <i>l.</i> per week	112,380
„ „ by 200 Crate-makers, earning 2 <i>s.</i> per week	2,200
„ „ by 185 Engravers, unemployed three days per week, whose average earnings were 26 <i>s.</i> per week	1,202
„ sustained in wages by 1,200 Colliers, earning 2 <i>s.</i> per week	12,600
„ on rental of 64 manufactories, according to valuation in the parochial surveys	2,881
„ on rental of 31 steam-mills, employing 850 horse power, according to valuation in the parochial surveys	1,020
„ on interest of capital employed by the 64 manufacturers, estimated at 720,000 <i>l.</i> , at 5 per cent. per annum	6,940
Expenditure of Chamber of Commerce in mutual assistance, Payments to Secretaries, &c.	3,383
Expenditure of Potters' Union, according to their own published statement	14,836
	<hr/> 157,442
Total loss incurred on the two strikes	£188,610
	<hr/>
Total loss to the Operative Potters	152,816
„ to Colliers, Crate-makers, and Engravers	19,332
„ to the Manufacturers	16,462
	<hr/> £188,610
	<hr/>

CENTRAL SOCIETY OF EDUCATION.

Second Publication, Lond., 1838.

ONE of the distinguishing characteristics of the present era in this country is the increasing desire which exists on the part of the higher classes of society to improve the condition and to raise the character of the poor and labouring classes. The legislature is occupied in discovering and removing the errors and defects which a faulty constitution or the progress of time has introduced into the operation of the laws. Benevolent individuals are uniting in numerous societies for the purpose of enquiring accurately into the state of the poor; of searching out the true character of their wants; of considering and discussing the best method of supplying those wants; and, lastly, of pointing out and endeavouring to remove the obstacles which at present hinder national improvement. Such, for instance, are the various Statistical Societies, and the Central Society of Education, for purposes of enquiry; the Labourers' Friend Society, the Children's Friend Society, the Small Loan Fund, and the Friendly Loan Societies, with many others, to which men of opulence have given their time and money, for the purpose of improving

the character of the labouring classes, and of raising them from a state of pauperism, by their own exertions, to that of honest independence, and useful industrious employment. There must doubtless exist some difference in opinion upon the expediency of the various measures adopted by these Societies; but no person, unless blinded by prejudice, can withhold a just admiration of their objects, or respect for the motives which actuate their promoters.

One of the most important of these Institutions is the Central Society of Education, because the benefit which it seeks to confer is of a permanent nature, and one which may be termed self-reproductive of good. The statist will therefore receive with welcome the second volume of its publication; and, as part of its contents are strictly statistical, while the object of the whole bears upon the interests of society, it will not be improper to give some account of its contents in this place.

Among the articles more immediately connected with statistics is one by Mr. Porter, entitled "Statistical Enquiries into the Social Condition of the Working Classes, and into the means provided for the Education of their Children." This contains an abstract and a comparative view of the principal enquiries into the above subject which have been prosecuted during the past year. It includes those of a committee of gentlemen in the parish of St. Mary-le-bone into the state of the dwellings, occupation, intellectual attainments and education, of 1147 families in that parish; those of the Central Society of Education into several rural parishes in Essex and Herefordshire; those of the Statistical Society of London into the state of education in Westminster; and the results of a similar enquiry by the Statistical Society of Manchester, in the town of York.

The volume contains two statistical papers by Mr. Rawson; the first "On the State of Education within the District of Nattore in the Province of Bengal," and the other "On Negro Education in Jamaica." Both are drawn up from the reports of government officers. From the former it appears that of the total male population of the district only 8·7 per cent. possess, or are acquiring, any kind of instruction, and that if the females, who receive no instruction whatever, be added, the proportion will be reduced to 4·5 per cent. In Jamaica the proportion is 9·5 per cent.

One of the most useful objects of this publication is to call attention to the excellences and defects, either in the system or operation, of educational establishments. Notices are given in this volume of the Primary Normal School at Haerlem; of the Royal Military College at Chelsea; of the Junior School at Bruce Castle, Tottenham; and of the Model School of the British and Foreign School Society in the Borough-road.

Mr. Wyse has furnished an article "On the Lyceum System in the United States, with a Consideration of its Applicability to Mechanics' Institutions in this Country," which contains an account of the rise, the rapid progress, the object and operations of that system since its first establishment in 1826.

A paper, by Mr. Long, "On the Endowments in England for the Purposes of Education," contains a very able exposition of the numerous circumstances which embarrass the right administration of these charities.

The author shews the exact legal position of such endowments; the province of Visitors and of the Court of Chancery; with the want of power in either body to re-model those institutions which have become antiquated. He proves that all attempts to attain this end have been unlawful; but that the Court of Chancery, feeling the evil of the application of funds to purposes not harmonising with the age, has occasionally been tempted to act in opposition to the will of the founder. The endowments for purposes of education in this country possess an immense annual income, amounting, it is probable, to not less than 1,500,000*l.*; but the good which they effect is comparatively small, and in many instances they are productive of actual evil. From these facts Mr. Long draws the conclusion that, for the proper administration of these charities, there must be a power, and a large power, invested in some individual or body for the purpose of co-operating with, assisting, directing, and correcting, all those who are entrusted with the management of charity property, and especially of that which is applied to purposes of education; that a minister of education, who should be a member of the Cabinet, ought to be appointed; and that it is the duty of the State both to render the existing endowments more effective, by giving them a unity of purpose, without interfering with their particular objects; and further, to do what they have not hitherto attempted—to lay the foundation of a general education for all classes, which shall have for its object to cultivate the faculties of the understanding by a training adapted to the wants of every member of the community.

The writer of an article upon the "State of the Existing Schools for the Industrious Classes," after giving an account of the system and working of the existing institutions for education, comes to the same conclusion that, their amelioration and adequate extension to meet the wants of the people can only be effected by a Central Board of Education appointed by the Crown.

From an account by Mr. Wittich of the "Seminaries in Prussia for Schoolmasters for the Working Classes," it appears that although thirty years have not yet elapsed since these establishments were first formed in 1809, their number has already increased to about fifty; and it is thought that the number of teachers issuing from them annually is sufficient to satisfy the present demand. Every person in Prussia may apply for the admission of their sons into these seminaries. At a certain period of the year all the aspirants are summoned and examined, and those who evince the most knowledge and talent, and whose moral conduct bears examination, are admitted. They are allowed to remain in the school three years, at the expiration of which time they are examined, and receive testimonials according to their proficiency, which are divided into three classes, and characterized by the expressions—"distinguished," "good," and "sufficiently instructed."

An article on "Resident Assistants in Private Boarding Schools," points out the description of persons of which that class consists, the countries of which they are natives, and the general quality of the education which they possess; the nature of their functions in schools; the modes in which they procure situations; and the very powerful and mischievous influence which school-agents exercise on the condition of schools. It is stated that during the last year or two, assistants have

been much scarcer, and that the war in Spain and the progress of the railways are among the causes productive of this effect.

The remaining papers, which are not so nearly allied to Statistics, consist of an article on "Professional" (or Practical) "Mathematics," by Professor De Morgan; "An Examination of Lord Brougham's Bill for Promoting Education," by Mr. Duppa; "A Review of Physiology in Connection with Education," by Dr. King; "Suggestions for the Education of Young Ladies of small Pecuniary Means," by Lady Ellis; an article on "Infant Schools for the Upper and Middle Classes," by Mrs. Porter; and an eloquent letter, by M. de Fellenberg, "On the Relation between Education and the State."

PROVINCIAL STATISTICAL SOCIETIES IN THE UNITED KINGDOM.

THE MANCHESTER Society for the promotion of Statistical Enquiries was the first of the kind established in this country. In 1833 a number of gentlemen, who felt a strong desire to assist in promoting the progress of social improvement in the surrounding manufacturing population, and who had been much struck with the extreme deficiency of all accurate statistical information regarding this country, met together, and formed themselves into a society, with the view of supplying, by individual industry, some of the deficiencies which they regretted. The Society, at its first meeting on the 2d September 1833, numbered 13 members, who set to work immediately to procure accurate information on the most important matters connected with the moral and physical condition of the population in their own immediate neighbourhood.

For the more elaborate of their investigations they have employed paid agents, on whose zeal, diligence, and scrupulous fidelity they could place reliance; but their funds being very limited, much labour has fallen upon the members themselves, and the proceedings of their agents have always been sedulously superintended by Committees of the Society.

The earliest publication of the Manchester Statistical Society was an Analysis of the Evidence given before the Factory Commission, the first edition of which was rapidly disposed of. They also, in their first session, turned their attention to the important subject of the Education of the people, and have published a series of Reports, containing a minute and detailed analysis of the number and nature of the schools, of the number of scholars, and of the amount and kind of instruction given in the schools, in the five towns of Manchester, Salford, Bury, Liverpool, and York, comprising an aggregate population of nearly 600,000 individuals. One of these Reports has reached a second edition.

The Society have carried on a still more arduous enquiry, in which they employed agents to visit, from house to house, the whole of the working population in six manufacturing towns, viz., Manchester, Salford, Bury, Ashton, Stalybridge, and Dukinfield, containing more than 300,000 inhabitants; and they have lately published the results of their enquiries in a Report, which exhibits the various information obtained, in a tabular

form.* This Report was read at Liverpool in the Statistical Section of the British Association for the Advancement of Science, at whose meetings several of the other Reports of the Society have been presented.

A collection of miscellaneous Papers and Reports is now in course of publication, and some further original enquiries are in progress.

The Society meet eight times in the year, at intervals of a month, from October to May; and there are now upwards of 50 members.

The fact of this Society having, within the space of four years, and with a permanent income of little more than 100*l.* a year, completed seven extensive original enquiries, some of which have been prosecuted in distant towns, shews with what zeal its members have been animated, and affords both an example and an encouragement to similar societies in other places.

[The Statistical Society of BRISTOL was established in November 1836, soon after the meeting of the British Association in that town, in the Statistical Section of which it may be said to have taken its rise. It consisted at first of 46 members, which number is now increased to 54, besides one life and two honorary members. There are three General Meetings in the year, besides the Annual Meeting. The income of the Society is almost wholly absorbed in an enquiry which it is prosecuting into the state of the working classes in Bristol. The first Report upon this subject was read before the Statistical Section of the British Association at Liverpool, and has since been printed in the First Annual Report of the Society.

The other enquiries in which the Society is at present engaged, are, 1st, into the number of births, deaths, and marriages within the borough from the year 1813; 2nd, into the Statistics of Hospitals; 3rd, into the Statistics of Assurance Offices in Bristol; and 4th, into the amount of Irish produce imported into Bristol. A very full enquiry into the state of education in Bristol had been completed by Mr. C. Bowles Fripp before the formation of the Society, and was read before the British Association at its meeting in that town.

At the meeting of the British Association at LIVERPOOL in 1837, Viscount Sandon, who was President of the Statistical Section, and one of the Representatives of the borough, took several opportunities of recommending the formation of a Statistical Society in that town. The suggestion was favourably received, and on the 1st of January 1838, a Society was formed, which now consists of 85 members. It is too soon to expect any important result from its labours, but Committees have been appointed to make enquiries into the following subjects:—1st, the trade between Great Britain and Ireland; 2nd, the Statistics of human life, divided into two branches—medical Statistics, or the physical condition of man, particularly of the labouring classes; and moral and educational, or social Statistics; and 3rd, criminal Statistics. The Society holds three stated General and one Annual Meeting in the year.

* This and the other publications of the Manchester Statistical Society may be purchased at Messrs. C. Knight and Co.'s, Messrs. James Ridgway and Sons', and Mr. R. H. More's, London.

The Statistical Society of ULSTER originated with some members of another Society, which was founded in 1821, under the title of the Belfast Natural History Society, and which has for its objects the cultivation of the study of natural history, and the investigation of the topography of Ireland. These gentlemen, taking advantage of a recent regulation of that body, permitting sections to be formed amongst its members for the cultivation of other branches of knowledge, agreed to form one exclusively devoted to statistical research, a subject to which the attention of some of them had been directed when attending the meetings of the British Association.

The first preliminary meeting was held on the 23d November 1837. At a subsequent meeting on the 3d February 1838, 21 members attended, when it was agreed, in consequence of the importance of the proposed subjects of enquiry, to form a distinct society, to be called the "Statistical Society of Ulster," which was finally constituted on the 29th March last, at which time 67 members had been enrolled. Eleven gentlemen have since joined, and the total number at present is 78. The first meeting of the Council was held on the 10th April, at which Committees for the investigation of the following subjects were appointed:—1st, Education; 2nd, Trade between Ireland and Great Britain; 3rd, The physical and intellectual condition of the working classes; 4th, State of Agriculture; 5th, Mechanical Power employed in Belfast and the neighbourhood. The meetings of the Society are appointed to take place on the second Friday of each month.

In our next number we hope to be able to give an account of the Glasgow, Glasgow and Clydesdale, Birmingham, and Leeds Statistical Societies, together with some others, which are now in progress of formation.

PROCEEDINGS OF STATISTICAL SOCIETIES.

STATISTICAL SOCIETY OF LONDON.

Ordinary Meeting, Monday, February 19th, 1838. Sir CHARLES LEMON, Bart., M.P., President, in the Chair.

THE Auditors' Report of the Accounts for 1837 was read.

William Campbell Gillan, Esq., was elected a Fellow of the Society.

The printed First Report of the Education Committee "on the State of Schools in Westminster" was presented. A similar Report from the Statistical Society of Manchester, "on the Schools of the City of York," and the "First Annual Report of the Proceedings of the Statistical Society of Bristol," were laid before the meeting.

It was announced that the Society recently established at Belfast had taken the title of "The Statistical Society of Ulster," in consequence of an increased interest excited on the subject, and a contemplated extension of operations; and that the Statistical Society of Liverpool, at the suggestion of this Society, had formed a Committee to investigate the state of the Trade between Great Britain and Ireland.

It was announced that a Committee had been formed by the Council "To collect a Statistical Account of the various Strikes and Combina-

tions which have existed in different parts of the Kingdom for the purpose of altering the Rate of Wages, and of introducing new regulations between Masters and Men." In reply to a question by a member relating to the Committee's proceedings, it was stated that a paper of queries had been prepared for the purpose of eliciting the history of strikes (see p. 11), and that an account had already been received from Mr. Ashton of a turn-out which occurred in December, 1830, among the cotton-spinners of Ashton-under-Lyne and adjacent towns, which, at the request of the meeting, was read. This paper will hereafter be inserted in the Report of the Committee on Strikes.

Mr. Rawson then communicated some information from M. Quetelet, of Brussels, relating to the "Atelier de Charité at Ghent," an account of which was read at the preceding meeting.

General Anniversary Meeting, March 15. Sir CHARLES LEMON, Bart., M.P., President, in the Chair.

The Fourth Annual Report of the Council and the Report of the Auditors for 1837 was read.

A new Rule respecting arrears and withdrawal was proposed by the Council, and was ordered to be included in the Regulations of the Society.

The Council and Officers were balloted for and elected.

The Chairman stated to the meeting that the Rev. E. Wyatt Edgell, a Fellow of the Society, had volunteered to undertake, at his own expense, an enquiry into the state of the schools in a district of St. George's Parish, Hanover Square, similar to that which the Committee is prosecuting in the other parishes of Westminster.

Ordinary Meeting, Monday, March 19. Sir CHARLES LEMON, Bart., M.P., Vice-President, in the Chair.

The following Gentlemen were elected Fellows of the Society:—

William M. Brown, jun., Esq., George Knott, Esq., Major Pringle Taylor.

A paper was read "On the Origin and Progress of the Copper Mines of Cornwall," by Sir Charles Lemon, Bart., M.P. This paper will be printed in a future number of the Journal.

Ordinary Meeting, Monday, April 16. Sir CHARLES LEMON, Bart., M.P., Vice-President, in the Chair.

It was announced that the President had nominated as Vice-Presidents—

The Right Honourable Sturges Bourne, Sir Charles Lemon, Bart., M.P., Lord Viscount Sandon, M.P., Lieut. Colonel Sykes.

Seven Gentlemen were elected Fellows of the Society, namely:—

W. J. Bovill, Esq., Thomas Alcock, Esq., Joseph Marsh, Esq., George Henry Pinckard, Esq., Henry Stroud Barber, Esq., E. Gibson Atherley, Esq., John Boyle, Esq.

A paper was read "On several Strikes in the Potteries of Staffordshire," by John Boyle, Esq. (See p. 37).

A Report was then read "On the State of 176 Poor Families in Miles Platting," by James Heywood, Esq. (See p. 34).

STATISTICAL SOCIETY OF LIVERPOOL.

The First General Meeting of this Society was held on the 30th March.

The Report of the Council was laid before the meeting, and the following papers were read:—1st, "An account of the Condition of the Agricultural Classes at the Present Day as compared with what it was 60 or 70 Years ago," by John Merritt, Esq.; 2d, A paper by the Chaplain of Kirkdale Gaol, "Upon the Causes of Crime and the Effects of Prison Discipline;" and 3d, A "Report upon the Strike among the Operatives employed in the Building Trade in Liverpool during the year 1833."

STATISTICAL SOCIETY OF ULSTER.

At a meeting held at Belfast, on the 29th March, this Society was finally constituted, and the rules for its management agreed to. The First Meeting of the Council was held on the 10th of April, when several Committees for carrying on original enquiries were formed, for an account of which see p. 50. The First General Meeting of the Society will take place on the 11th May, when will be read an Introductory Address, by Captain Portlock, R.E., Vice-President, "Upon the Objects and Advantages of Statistical Enquiries."

MISCELLANEOUS.

New Poor Law Act.

Total Number of Parishes in England and Wales . . .	14,482
Population in 1831	13,897,187
Number of Parishes united under Poor Law Act on } 15th December, 1837 *	13,306
Population of ditto	11,506,590
Number of Parishes not united	1,176
Population of ditto	2,390,597
Of the 1,176 Parishes not united { 178 are under Gilbert's Act. 442 are under Sturges Bourne's or Local Acts. 556 are not yet united.	
Average Expenditure, per head, in 1803.	s. d. 9 2
" " 1818.	13 2
" " 1837.	5 10

* Since the above period *Four* Unions have been formed, comprising *Forty* Parishes, with a Population in all of 90,365.

Poor Law Administration.

In 214 Poor Law Unions, including one in Wales, the number of paupers relieved during the Christmas quarter of 1837, compared with the corresponding quarter in 1836, had increased from 282,992 to 294,324; but the expenditure had decreased from 302,144*l.* to 299,118*l.*

Commons' Paper, No. 230.

Operation of New Poor Law—Marriages.

The number of marriages of labourers in Norfolk and Suffolk has decreased in a remarkable manner since the introduction of the New Poor Law.

In 1833 the total number was	762	
1834	771	
1835	663	Decrease 16·3 per cent.
1836	549	Further decrease 20·7 ditto.
Total decrease in two years 40 per cent.		

This effect of the new administration of the poor laws is by no means confined to the above counties.

Commons' Paper, No. 210.

Progress of Russia.

The acquisitions of Russia from	Sweden . . .	equal the remainder of Sweden.
	Poland . . .	the Austrian Empire.
	European Turkey . .	Prussia, exclusive of the Rhenish Provinces.
	Asiatic Turkey . .	the German Small States, Rhenish Prussia, Hol- land, and Belgium.
	Persia . . .	England.
	Tartary . . .	European Turkey, Greece, Italy, and Spain.

The Russian Frontier has been advanced towards

Berlin, Dresden, Munich, Vienna, and Paris,	about 700 Miles.
Constantinople	500 "
Stockholm	630 "
Teheran	1000 "

The total acquisitions of Russia in 64 years equal her whole European empire before that time.

Estimated Population of Russia.

In 1689 at the Accession of Peter I.	15,000,000 inhabitants.
1762 " " Catherine II.	25,000,000 "
1796 " death of "	36,000,000 "
1825 " " Alexander	58,000,000 "

Oats from Ireland.

Ireland is now the oat granary of the empire; out of 2,929,322 quarters of grain and flour, imported from that country into Great Britain in 1836, the quantity of oats and oatmeal amounted to 2,126,693 quarters,

OUTRAGES, IRELAND.

Abstract of the Total Number of Outrages reported by the Officers of Police in Ireland to the Inspector General of Police, in each Month from July 1836 to February 1838; shewing, first, the Number which occurred in each Province, and secondly, the Class of Offences.

MONTHS.	PROVINCES.					CLASS OF OFFENCES.				
	Ulster.	Leinster.	Connaught.	Munster.	Total.	Against the Person.	Against Property.	Affecting the Public Peace.	Other.	Total.
1836.										
July . .	149	205	62	93	509	119	147	243	..	509
August .	100	379	197	185	861	263	315	280	3	861
September.	122	294	145	178	739	274	228	236	1	739
October .	128	324	124	123	699	243	242	210	4	699
November.	182	262	119	116	679	246	263	170	..	679
December .	162	337	158	113	770	296	332	142	..	770
1837.										
January .	200	389	192	169	950	332	360	251	7	950
February .	175	272	185	133	765	235	289	238	3	765
March . .	107	262	108	166	643	159	188	296	..	643
April . .	81	207	71	139	498	129	175	194	..	498
May . . .	96	225	136	173	630	152	227	251	..	630
June . . .	105	191	98	125	519	126	166	226	1	519
July . . .	92	158	73	91	414	112	146	155	1	414
August .	76	201	122	132	531	152	157	221	1	531
September.	73	183	146	150	552	139	145	268	..	552
October .	127	230	90	140	587	175	173	238	1	587
November.	136	228	95	154	613	189	176	247	1	613
December .	151	283	150	191	775	241	253	279	2	775
1838.										
January .	67	174	82	124	447	122	171	152	2	447
February .	76	186	76	88	426	128	175	122	1	426

Abstract of Commons' Papers, Nos. 167 and 214.

Military in Ireland.

The following is a Return of the total effective rank and file of Cavalry, Foot-guards, and Infantry of the Line, stationed in Ireland, on the 1st of January in each year, from 1828 to 1837; with an estimate given in December, 1837, of the number likely to be stationed there on the 1st of January, 1838. It exhibits a decrease of 3,478 men, or 28 per cent. in 1838, compared with the first year of the series.

Years.	Rank and File.	Years.	Rank and File.	Years.	Rank and File.
1828	19,496	1832	18,404	1836	17,097
1829	21,739	1833	23,125	1837	17,671
1830	19,551	1834	22,162	1838	16,018
1831	15,864	1835	18,086		

Lords' Paper, No. 120.

Constabulary Force—Ireland.

The following Return exhibits the effective strength of the Constabulary Force in the several counties of Ireland on the 1st of January in each of the years 1828 and 1838. In the latter year is included the Peace Preservation Police, which was incorporated with the Constabulary on the 1st of October, 1836, upon the organization of that force under the 6th Wm. IV. cap. 13. This account shews that between the years 1828 and 1838 the total force had increased from 5,284 to 7,953 men, a difference of 2,669 men, or 54 per cent. on the former number. The military force, however, had been diminished within the same period by 3,478 men. If the decrease of the military and the increase in the population of Ireland during the ten years be taken into account, it is clear that the force employed for the preservation of the peace in that country is considerably smaller now, in proportion to the population, than it was in the year 1828.

With respect to the different counties, it appears that in Fermanagh the force is actually less now than in 1828; that in Kildare and Londonderry it has remained stationary; that in Antrim, Armagh, Cavan, Down, Kerry, Leitrim, Longford, Meath, Tyrone, Westmeath, and Wicklow, it has been slightly increased; while in Kilkenny, Limerick, Louth, and Queen's County, it has been more than doubled.

	1828.	1838.		1828.	1838.
Antrim . . .	168	187	Londonderry . .	92	92
Armagh . . .	96	114	Longford . . .	96	139
Carlow . . .	72	122	Louth . . .	75	184
Cavan . . .	144	178	Mayo . . .	173	261
Clare . . .	200	350	Meath . . .	288	329
Cork . . .	411	584	Monaghan . . .	79	129
Donegal . . .	96	175	Queen's County .	153	323
Down . . .	128	154	Roscommon . . .	170	250
Dublin . . .	144	239	Sligo . . .	108	182
Fermanagh . .	128	112	Tipperary . . .	361	686
Galway . . .	369	604	Tyrone . . .	136	147
Kerry . . .	128	161	Waterford . . .	100	180
Kildare . . .	224	225	Westmeath . . .	238	259
Kilkenny . . .	192	435	Wexford . . .	139	230
King's County .	192	266	Wicklow . . .	128	165
Leitrim . . .	80	107			
Limerick . . .	176	366			
			Total . . .	5284	7953

From Lords' Paper, No. 116.

Peace Preservation Police—Ireland.

This force was in existence in the county and city of Limerick in the year 1828. In 1832 it was established in the counties of Clare, Galway, Roscommon, and Kilkenny; and in the following year it was extended to the city of Kilkenny and the counties of Tipperary and Wicklow. In October, 1836, it was incorporated with the Constabulary, under the Act 6 Wm. IV. c. 13.

From Lords' Paper, No. 116.

Live Stock from Ireland.

The value of live stock imported at Liverpool from Ireland, in 1837, amounted, on a moderate computation, to 3,397,760*l*. The importation of live stock at Bristol is also considerable.

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STATEMENT of the Number of Acres in the United Kingdom; Nature of Seasons; Annual Average Prices of Corn and other Agricultural Produce; Amount of Hop and Malt Duty in England and Wales; and Prices of Three per Cent. Consols. Compiled by G. N. DRIVER, Esq., of Richmond Terrace, for Private Circulation among Land Surveyors.

Miscellaneous.

[May,

Years.	Nature of the Seasons.	CORN per quarter.					WOOL per lb.		Beef & Mutton per lb.	Cheese per lb.	Hops per cwt.	Hop Duty, 1st. ed. per cwt. from 1803. £.	Malt Duty, in Millions of Pounds, &c. 7d. per bushel from 1823.	3 per Cent. Consols. Mean of the highest and lowest.	Years.	
		Wheat.	Rye.	Barley.	Oats.	Beans.	Peas.	South-down.								Lincolnshire.
1790	{ Peace and favourable Seasons . . . }	s. d. 53 3	s. d. 34 0	s. d. 25 6	s. d. 18 6	s. d. 31 0	s. d. 32 10	s. d. 1 4	s. d. 0 8	d. 3 1	d. 4	£. 106,841	1 1/2	76 1/2	1790	
1791		s. d. 47 3	s. d. 31 8	s. d. 25 9	s. d. 18 3	s. d. 30 6	s. d. 32 2	s. d. 1 5 1/2	s. d. 0 8 1/2	d. 4	d. 4 1/2	£. 90,059	2 3/4	83 1/2	1791	
1792		s. d. 42 0	s. d. 29 0	s. d. 26 10	s. d. 17 10	s. d. 30 8	s. d. 31 5	s. d. 2 0	s. d. 0 10	d. 4	d. 4 1/2	£. 162,113	2 3/4	85 1/2	1792	
1793		s. d. 47 10	s. d. 35 1	s. d. 31 9	s. d. 21 0	s. d. 36 5	s. d. 38 9	s. d. 2 1/2	s. d. 0 7 1/2	d. 4 1/2	d. 4 1/2	£. 22,620	1 1/2	75 1/2	1793	
1794	{ War but favourable Season . . . }	s. d. 51 0	s. d. 36 4	s. d. 32 10	s. d. 22 0	s. d. 38 1	s. d. 47 0	s. d. 1 4 1/2	s. d. 0 7 1/2	d. 4 1/2	d. 5 1/2	£. 203,063	1 1/2	68 1/2	1794	
1795		s. d. 73 0	s. d. 48 5	s. d. 37 6	s. d. 24 6	s. d. 46 8	s. d. 53 4	s. d. 1 7 1/2	s. d. 0 8 1/2	d. 4 1/2	d. 5 1/2	£. 82,343	1 1/2	66 1/2	1795	
1796		s. d. 76 6	s. d. 47 0	s. d. 35 9	s. d. 21 9	s. d. 38 10	s. d. 43 6	s. d. 1 7 1/2	s. d. 0 8 1/2	d. 6	d. 5 1/2	£. 75,224	1 1/2	62 1/2	1796	
1797	{ Seasons less unfavourable . . . }	s. d. 52 6	s. d. 31 11	s. d. 27 10	s. d. 16 9	s. d. 27 6	s. d. 33 5	s. d. 1 6	s. d. 0 9	d. 5 1/2	d. 5 1/2	£. 157,458	2 1/2	52	1797	
1798		s. d. 50 6	s. d. 30 11	s. d. 29 3	s. d. 20 0	s. d. 30 1	s. d. 33 11	s. d. 1 6 1/2	s. d. 0 7 1/2	d. 5 1/2	d. 6	£. 56,032	1 1/2	52 1/2	1798	
1799		s. d. 67 6	s. d. 43 9	s. d. 35 9	s. d. 27 6	s. d. 44 7	s. d. 45 2	s. d. 2 0	s. d. 0 9	d. 5 1/2	d. 6 1/2	£. 73,280	2 1/2	60 1/2	1799	
1800	{ Bad Season }	s. d. 110 6	s. d. 76 11	s. d. 60 0	s. d. 39 6	s. d. 69 3	s. d. 67 5	s. d. 1 9 1/2	s. d. 0 9 1/2	d. 6 1/2	d. 6 1/2	£. 72,928	1 1/2	63 1/2	1800	
1801		{ Good Crop followed by Peace; also by favourable Seasons in 1802-3 }	s. d. 115 11	s. d. 79 9	s. d. 67 10	s. d. 36 9	s. d. 62 8	s. d. 67 8	s. d. 1 9 1/2	s. d. 1 0 1/2	d. 8	d. 6 1/2	£. 241,227	1 1/2	62	1801
		Acres.					Acres.		Acres.		Acres.		Acres.		TOTAL.	
ENGLAND		25,632,000					3,454,000		3,256,400		32,342,400		32,342,400			
WALES		3,117,000					530,000		1,105,000		4,752,000		4,752,000			
SCOTLAND		5,265,000					5,950,000		8,523,930		19,738,930		19,738,930			
IRELAND		12,525,280					4,500,000		2,416,664		19,441,944		19,441,944			
BRITISH ISLES		383,690					166,000		569,469		1,119,159		1,119,159			
TOTAL		46,922,970					14,600,000		15,871,463		77,394,433		77,394,433			

SLAVERY COMPENSATION.

Number of Slaves in each Colony; Total Amount and Average Rates of Appraised Value; Average of Sales from 1822 to 1830; and Total Amount and Average Rates of Compensation.

COLONIES.	Number of Slaves.	{Appraised Value by sworn Valuers.		Average of Sales of Slaves from 1822 to 1830.		Compensation Apportioned.	
		Total Amount.	Average Rates.			Total Amount.	Average Rates.
		£.	£. s. d.	£. s. d.	£.	£. s. d.	
Antigua	39,191	1,777,026	61 0 5½	32 12 10½	425,547	14 12 3	
Bahamas	10,086	294,194	29 3 4	29 18 9½	128,296	12 14 4½	
Barbadoes	83,150	4,428,510	63 5 2	47 1 3½	1,719,986	20 13 8½	
Bermuda	4,026	175,194	43 10 3	27 4 11½	50,409	12 10 5	
Cape of Good Hope	35,742	3,040,829	85 1 6	73 9 11	1,235,996	34 11 7½	
Dominica	14,175	719,346	50 14 9½	43 8 7½	375,547	19 8 9½	
Grenada	23,638	1,791,325	75 15 7½	59 6 0	616,253	26 1 4½	
Guiana, British.	32,224	11,302,190	126 9 2½	114 11 5½	4,294,909	61 17 1½	
Honduras	1,901	236,219	124 5 2	120 4 7½	101,399	53 6 9½	
Jamaica	311,070	15,501,047	49 16 7	44 15 2½	6,143,937	19 15 4½	
Mauritius	66,613	5,321,717	79 17 9½	69 14 3	2,099,983	31 10 6	
Montserrat	6,401	408,486	63 16 3½	36 17 10½	103,556	16 3 6½	
Nevis	8,815	378,553	42 18 10½	39 3 11½	151,006	17 2 7½	
St. Christopher's	19,780	888,730	44 15 6½	36 6 10½	329,393	16 13 0½	
St. Lucia	13,291	798,120	60 0 11½	56 18 7	334,495	25 3 4	
St. Vincent's	22,266	1,602,467	71 19 4½	58 6 8	590,779	26 10 7½	
Tobago	11,589	485,155	41 17 3	45 12 0½	233,875	20 8 7½	
Trinidad	20,657	2,101,495	101 14 7½	105 4 5½	1,033,992	50 1 1½	
Virgin Islands	5,135	219,925	42 16 6½	31 16 1½	72,638	14 9 10½	
TOTAL	770,280	51,467,436	66 16 3½	56 9 1½	19,948,080*	25 17 11½	

* To this amount must be added 51,930*l.* for sums reserved to meet extraordinary Claims and for fractional parts, and the whole will amount to 20,000,000*l.*

Partly abstracted from Lords' Paper, No. 93, and Commons' Paper, No. 64.

Commission of Compensation.—The expenses of this Commission amounted, on the 31st December 1837, to 97,242*l.* Of this 36,095*l.* is the amount of expenses in this country; the remaining sum of 61,147*l.* has been expended in the Colonies for the following purposes: 19,978*l.* to Appraisers; 22,323*l.* to Auxiliary Commissioners; and 18,845*l.* to miscellaneous charges. The total expense hitherto has been not quite $\frac{1}{2}$ per cent. upon the sum distributed. The claims remaining undecided, on the 27th January, amounted to 1,330,598*l.*; and it is expected that the total expense of the Commission will not exceed $\frac{3}{4}$ per cent.

Lords' Papers, Nos. 26 and 66.

Jamaica Apprentices.—The number of apprentices in Jamaica who purchased their freedom, between the 1st August 1834, and the 31st July 1837, exclusive of a period of four months ending the 31st October 1836, (for which no returns have been received), was 2171—averaging 70 in each month. The gross sum which they paid was 68,029*l.*; and the average per head was 31*l.* 6*s.* 8*d.* If to this be added the average compensation in Jamaica of 19*l.* 15*s.* 4½*d.* the total sum per head received by the owners amounts to 51*l.* 2*s.* 0½*d.* The average appraised value of slaves in the island was 49*l.* 16*s.* 7*d.*; and the average of sales of slaves, from 1822 to 1830, was 44*l.* 15*s.* 2½*d.*—

Lords' Paper, No. 96, and Commons' Paper, No. 61.

Number of Slaves of each Class registered in the several Colonies upon which the Compensation was apportioned.

	Jamaica.	Honduras.	Antigua.	St. Christo.	Grenada.	Dominica.	St. Lucia.	Bermuda.	St. Vincent.	Norfolk.	Bahamas.	Montserrat.	Barbadoes.	Tobago.	Virgin Islands.	British Guiana.	Trinidad.	Mauritius.	Cape of Good Hope.	Total.
Head People	14,043	..	593	660	1,164	631	332	..	977	276	69	261	1,968	209	137	3,313	1,100	838	..	26,511
Free People	11,244	..	990	970	741	946	327	..	968	319	..	106	1,831	350	84	1,610	345	965	..	19,696
Unattached	2,635	..	306	157	578	76	30	..	375	43	13	47	784	248	68	618	333	1,395	..	7,405
Attached	107,053	..	11,350	5,655	8,649	5,931	5,864	7	7,638	9,976	2,652	9,379	37,698	3,724	1,410	39,193	8,018	16,590	..	266,376
Field Labourers	63,993	..	6,502	4,928	5,738	2,958	2,192	1	5,605	1,510	1,936	1,171	15,615	3,567	1,067	13,073	9,449	7,087	..	138,698
Inferior ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	136,896	..	19,641	11,764	16,560	9,898	8,385	8,147	797	5,133	4,030	3,954	47,876	9,109	2,796	57,807	19,344	36,830	..	448,610
Head People	1,399	24	9	24	10	11	8	..	23	7	4	18	38	6	25	153	86	224	396	9,401
Free People	1,132	15	39	14	21	30	3	..	32	16	..	6	294	5	5	62	51	339	924	9,937
Unattached	1,388	6	10	16	10	11	1	..	31	2	..	9	163	5	5	38	34	584	107	1,336
Attached	11,670	594	473	430	214	403	356	..	7,638	104	187	289	9,338	74	396	3,578	1,901	4,577	5,652	33,543
Field Labourers	5,104	240	197	353	135	191	100	3	1,78	46	77	151	1,568	68	285	1,656	857	1,756	5,332	17,750
Inferior ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	19,565	809	737	837	380	636	368	10	512	176	270	556	4,317	158	630	5,475	1,639	7,594	11,727	56,259
Head People	1,798	10	259	139	95	38	36	125	115	88	161	51	391	40	14	873	92	1,874	1,860	6,914
Free People	780	13	515	89	133	32	36	159	109	25	49	33	408	19	23	575	320	5,347	963	5,915
Unattached	1,498	8	80	183	88	13	3	354	247	498	470	45	64	66	93	49	59	411	90	4,116
Attached	901	10	503	84	498	45	80	317	136	108	331	5	1,071	55	35	230	133	945	92	5,310
Field Labourers	12,886	399	303	1,457	938	931	1,061	923	932	903	1,367	323	3,816	316	384	2,979	1,678	7,132	5,856	42,454
Inferior ditto	19,088	338	1,953	1,114	975	846	230	1,408	1,255	304	1,167	170	8,695	316	414	1,893	1,854	10,066	9,942	61,788
Total	36,834	778	2,933	3,065	2,069	1,199	1,605	3,536	2,806	1,936	3,444	516	14,445	813	902	6,297	3,766	33,576	17,384	136,401
Children under 6 years of Age, on 1st August, 1834	39,013	324	4,337	3,198	3,330	2,112	1,967	606	2,963	1,361	2,063	1,145	14,738	1,479	749	9,696	2,946	7,613	5,732	104,632
Age, Disposed, or otherwise	15,692	90	1,444	915	1,369	386	1,006	1,06	1,188	339	999	320	1,790	1,082	63	3,852	872	2,809	892	33,319
Non-effective	1,075	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Runaways	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	311,070	1,901	89,121	19,780	23,638	14,175	13,321	4,086	29,865	8,815	10,666	6,401	83,150	11,569	5,136	89,834	30,657	56,613	35,748	770,980

Abstract of Lords Paper, No 93.

Charges incurred by the United Kingdom on account of the Canadas, and of the other North American Colonies, 1827 to 1836.

Years.	THE CANADAS.							Actual Expenditure on account of other North American Colonies.	Grants to Religious Societies in all the Colonies.	Total Expenditure.
	Payments on account of the					Repayments.	Actual Expenditure.			
	Army.	Navy.	Ordnance.	Commisariat, &c.	Total.					
	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
1827	92,651	15,396	119,875	110,282	338,204	20,315	317,889	211,070	15,332	544,291
1828	82,097	24,551	118,104	129,236	363,918	20,699	343,819	220,528	15,332	579,679
1829	81,897	20,239	99,033	136,973	338,149	22,918	375,224	193,099	15,332	523,655
1830	85,172	22,653	47,812	106,767	263,405	19,749	243,656	190,217	15,332	449,305
1831	92,916	13,565	75,603	90,545	272,639	26,100	246,539	209,088	15,332	470,949
1832	104,229	12,854	64,802	121,089	302,974	28,355	264,619	202,756	11,000	485,375
1833	78,312	10,165	71,499	107,599	267,575	22,745	244,830	150,978	8,000	403,808
1834	75,110	7,856	56,826	117,403	257,195	26,407	220,788	154,004	4,000	378,792
1835	71,355	2,853	51,990	89,381	215,579	42,918	166,661	153,146	3,850	323,657
1836	107,246	1,106	53,451	160,650	322,453	63,073	259,380	157,875	3,850	421,103

Abstract of Lords' Paper, No. 110.

Provincial Revenues of Upper and Lower Canada, 1832 to 1836.

Provinces.	1832	1833	1834	1835	1836
Upper Canada .	£. 53,145	£. 66,024	£. 74,882	£. 61,161	£. 69,141
Lower Canada .	153,467	137,342	91,761	122,066	102,027
Total . .	206,612	203,366	166,643	183,227	171,168

Lord's Paper, No. 52.

Trade of the United Kingdom with the Canadas, 1827 to 1836.

Years.	Official Value of Imports from the Canadas.	Official Value of Exports to the Canadas.			Declared Value of British Exports to the Canadas.
		British.	Foreign and Colonial.	Total.	
1827	£. 468,766	£. 794,637	£. 155,853	£. 950,490	£. 617,709
1828	466,065	1,059,225	189,058	1,248,283	787,289
1829	569,452	980,476	136,946	1,117,422	709,141
1830	682,202	1,388,201	181,819	1,570,020	997,502
1831	902,915	1,749,847	172,242	1,922,089	1,136,819
1832	795,652	1,863,118	215,831	2,078,949	1,173,587
1833	756,466	1,789,876	310,335	2,100,211	1,171,565
1834	613,598	1,171,540	168,085	1,339,625	799,912
1835	629,051	1,842,176	285,355	2,127,531	1,184,985
1836	633,575	2,388,861	350,646	2,739,507	1,539,153

Lords' Paper, No. 49.

British Shipping employed in the Trade of the Canadas, 1832 to 1836.

Years.	Entered Inwards.						
	Belonging to the United Kingdom.		Belonging to the British Possessions beyond Sea.		Total.		
	No.	Tons.	No.	Tons.	No.	Tons.	Men.
1832	933	262,345	128	17,394	1,061	279,739	12,768
1833	914	259,690	158	16,856	1,072	276,546	12,391
1834	1,002	292,699	150	16,305	1,152	309,004	13,489
1835	1,009	307,396	173	20,165	1,182	327,562	14,217
1836	1,061	333,830	168	24,891	1,229	358,721	15,231

Years.	Cleared Outwards.						
	Belonging to the United Kingdom.		Belonging to the British Possessions beyond Sea.		Total.		
	No.	Tons.	No.	Tons.	No.	Tons.	Men.
1832	1,071	277,516	190	29,908	1,161	307,424	13,902
1833	887	255,163	219	24,335	1,106	289,548	12,423
1834	1,002	292,345	214	27,463	1,216	319,808	13,968
1835	1,005	306,912	235	29,644	1,240	336,556	14,630
1836	1,065	334,369	261	40,682	1,326	375,051	15,986

Lords' Paper, No. 67.

Comparative View of British Shipping employed in the Trade of each of the British North American Colonies, in the Year 1836.

Colonies.	Entered Inwards.						
	Belonging to the United Kingdom.		Belonging to British Possessions beyond Sea.		Total.		
	No.	Tons.	No.	Tons.	No.	Tons.	Men.
Canada . . .	1,061	333,803	168	24,891	1,229	358,721	15,231
New Brunswick . .	503	141,675	2,698	206,644	3,201	348,319	17,143
Nova Scotia . .	127	24,708	4,236	293,202	4,363	317,910	17,834
Newfoundland . .	374	55,804	417	39,042	791	94,846	5,296

Colonies.	Cleared Outwards.						
	Belonging to the United Kingdom.		Belonging to British Possessions beyond Sea.		Total.		
	No.	Tons.	No.	Tons.	No.	Tons.	Men.
Canada . . .	1,065	334,369	261	40,682	1,326	375,051	15,986
New Brunswick . .	550	154,295	2,443	210,229	2,993	364,524	16,816
Nova Scotia . .	112	22,073	4,509	316,675	4,621	338,748	17,841
Newfoundland . .	358	52,487	431	41,525	789	94,012	5,473

Lords' Paper, No. 67.

Comparative View of the Trade of the United Kingdom with the Canadas, and with the other British North American Colonies, in the Year 1836.

Colonies.	Official Value of Imports.	Official Value of Exports.			Declared Value of British Exports.
		British.	Foreign & Colonial.	Total.	
	£.	£.	£.	£.	£.
Canada	633,575	2,398,861	350,646	2,739,507	1,539,153
New Brunswick	249,442	710,006	133,162	843,168	553,864
Nova Scotia	57,970	393,382	50,045	443,427	292,322
Cape Breton					
Prince Edward's Island					
Newfoundland	195,860	343,322	56,171	399,493	297,823
Coast of Labrador . . .	26,313	35,260	5,761	41,381	49,129
Settlements of Hudson's Bay Company					
Total	1,163,160	3,871,191	595,785	4,466,976	2,732,291

Lords' Paper, No. 49.

Trade and Navigation of the Canadas.

Years.	Trade with Foreign Countries.		Trade with British Colonies not in North America.		Shipping belonging to the Canadas.		
	Imports.	Exports.	Imports.	Exports.	No.	Tons.	Men.
	£.	£.	£.	£.			
1832	118,567	3,498	129,908	43,825	347	30,975	1,742
1833	187,190	3,109	112,052	33,231	322	28,727	1,698
1834	20,269	10,657	121,012	45,855	370	31,679	1,872
1835	22,602	13,809	99,471	42,607	372	33,098	1,785
1836	60,373	3,136	63,510	39,106	396	35,310	1,918

Lords' Papers, Nos. 94 and 67.

Comparative View of the Trade of the Canadas, and of the other British North American Colonies, in the Year 1836.

Colonies.	Trade with Foreign Countries.		Trade with British Colonies not in America.		Shipping belonging to each Colony.		
	Imports.	Exports.	Imports.	Exports.	Ships.	Tons.	Men.
	£.	£.	£.	£.			
Canada	60,373	3,136	63,510	39,106	396	35,310	1,918
New Brunswick	143,091	36,805	57,801	75,593	587	84,425	3,658
Nova Scotia	214,716	106,321	185,763	249,667	1,839	103,393	6,131
Prince Edward's Island	369	1,298	..	106	..	..	..
Cape Breton	1,073	24,148	7,013	6,734	..	..	..
Newfoundland	223,820	350,619	42,949	105,188	677	46,916	3,213
Total	643,442	522,327	357,036	476,394	3,499	270,044	14,820

Lords' Papers, Nos. 94 and 67.

REVENUE—INCOME and CHARGE.

An Abstract of the Net Produce of the Revenue of Great Britain in each of the Years and Quarters ended 5th April 1837 and 1838.

	Years ending 5th April.			
	1837	1838	Increase.	Decrease.
	£.	£.	£.	£.
Customs	19,703,107	18,451,449	..	1,251,658
Excise	12,715,305	11,665,748	..	1,049,557
Stamps	6,670,999	6,461,885	..	209,114
Taxes	3,681,916	3,627,105	..	54,811
Post-Office	1,491,000	1,519,743	28,743	..
Miscellaneous	50,421	34,443	..	15,978
Imprest Monies, Repay- ments, &c.	628,007	848,018	220,011	..
Total Income	44,940,755	42,608,391*	248,754	2,581,118

	Quarters ending 5th April.			
	1837	1838	Increase.	Decrease.
	£.	£.	£.	£.
Customs	4,436,505	4,061,670	..	374,835
Excise	1,834,443	1,705,853	..	128,590
Stamps	1,618,462	1,648,194	29,732	..
Taxes	181,219	130,576	..	50,643
Post-Office	367,000	369,000	2,000	..
Miscellaneous	26,334	25,841	..	493
Imprest Monies, Repay- ments, &c.	158,171	188,580	30,409	..
Total Income	8,622,134	8,129,714	62,141	554,561

* Total decrease on the year, 2,332,364*l.*; total decrease on the quarter, 492,420*l.*

An Abstract of the Income and Charge of the Consolidated Fund, in each of the Quarters ended 5th April 1837 and 1838.

INCOME.			CHARGE.		
Description.	Quarters ended 5th April.		Description.	Quarters ended 5th April.	
	1837	1838		1837	1838
	£.	£.		£.	£.
Customs	3,540,039	3,456,275	Permanent Debt	3,535,152	3,545,543
Excise	1,834,443	1,705,853	Terminable Annuities	1,376,068	1,374,218
Stamps	1,618,462	1,648,194	Interest on Exchequer Bills	15,838	24,662
Taxes	181,219	130,576	Sinking Fund	532,523	..
Post-Office	367,000	369,000	The Civil List	127,500	96,400
Miscellaneous	66,505	235,720	Other Charges	306,635	328,312
Total	7,607,668	7,545,618	Total Charge	5,893,716	5,369,135
Re-payments of Issues from Con- solidated Fund in Ireland	496,029	175,000	The Surplus	2,209,981	2,351,483
Total	8,103,697	7,720,618	Total	8,103,697	7,720,618

BANK OF ENGLAND.

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England in each of the Quarters ending 9th January and 30th April, 1838.

	LIABILITIES.			ASSETS.	
	9th January.	3d April.		9th January.	3d April.
	£.	£.		£.	£.
Circulation	17,900,000	18,987,000	Securities.	22,606,000	22,838,000
Deposits	10,992,000	11,262,000	Bullion	8,895,000	10,126,000
Total	28,892,000	30,249,000	Total	31,501,000	32,964,000

Quarterly and Annual Average Prices of Corn per Imperial Quarter in England and Wales, in each Quarter, from Midsummer 1835, to Lady Day 1838.

Quarters and Years.		Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1835	Midsummer . .	40 0	29 11	24 0	30 10	39 4	36 8
	Michaelmas . .	40 11	28 0	23 0	30 7	38 9	36 2
	Christmas . .	36 8	28 6	19 1	28 11	35 0	35 7
1836	Lady Day . .	40 6	28 10	20 0	28 2	34 2	33 11
	Midsummer . .	49 1	32 5	23 1	32 9	38 1	39 2
	Michaelmas . .	49 0	33 0	23 7	34 0	40 4	37 11
1837	Christmas . .	55 3	37 0	25 6	38 5	43 9	42 5
	Lady Day . .	57 2	33 9	23 7	38 9	38 10	37 8
	Midsummer . .	55 7	29 6	23 11	34 10	38 7	38 9
1838	Michaelmas . .	57 7	28 5	23 9	35 5	40 5	38 4
	Christmas . .	52 11	29 10	21 3	30 0	36 6	35 1
	Lady Day . .	55 1	28 10	20 4	29 8	32 11	32 8
Years	1835	39 4	29 11	22 0	30 4	36 11	36 6
	1836	48 6	32 10	23 1	33 4	39 1	38 4
	1837	55 10	30 4	23 1	34 9	38 7	37 6

Weekly Average Prices of Corn in England and Wales in the Month of March 1838.

	Weeks Ending March					
	2d.	9th.	16th.	23d.	30th.	Average of the Month.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat . .	55 3	55 4	56 3	56 10	57 9	56 3
Barley . .	28 8	28 6	28 10	29 6	29 7	28 10
Oats . .	20 11	20 6	20 8	21 2	21 4	20 11
Rye . .	30 0	29 3	31 6	30 7	33 0	30 10
Beans . .	32 10	32 5	32 9	33 1	33 11	33 0
Peas . .	33 0	33 4	33 0	32 9	32 10	32 11

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THE STATISTICS OF THE COPPER MINES OF CORNWALL.

BY SIR CHARLES LEMON, BART., M.P., F.R.S.

[*Read before the Statistical Society of London, March 19, 1838.*]

It may possibly render the accompanying Tables more intelligible if I give a slight sketch of the progress of the Copper Mines of Cornwall, since they have assumed an important station in the commercial wealth of the country; and this requires no distant retrospect. In a report on the state of the copper mines, drawn up in the year 1799, it is stated that "it was not until the latter end of the last century that copper ore was first discovered in Great Britain, and that was in working the tin mines of Cornwall, which have been wrought time immemorial." I believe that this statement is not strictly correct, but that copper, probably the produce of mines, more especially wrought for tin, was known at an early period, though in quantities by no means answering the demand even of those times. Hence the prohibition of its export in the time of Henry VIII. Carew says—"Copper is found in sundrie places, but to what gain to the searchers I have not been curious to inquire, nor they hasty to reveal; for of one mine of which I took view, the ore was shipped to be refined in Wales, either to save cost in the fuel, or to conceal the profit." Borlase, whose work was published in 1758, says—"The application of the Cornish to work the copper mines is not so old as the present generation." He says, "that, about forty years prior to that time, a certain Mr. Costar, who was particularly knowing in mechanics and hydraulics invented a new water-engine, by which he drained some considerable mines with success." "Here," he says, "we may date the advance of the price of copper, and the improvement of the copper mines." Mr. Carne ("Geological Transactions of Cornwall," vol. iii.), after adducing proof that copper only to a limited extent could have been raised in any part of England at an earlier period, and that no records are extant of copper raised in Cornwall previous to the latter part of the sixteenth century, concludes his argument with these remarks:—"On the whole, it appears probable, that previous to A. D. 1700, the copper ore produced in Cornwall was principally, if not wholly, from the tin mines, or at least from mines originally worked for tin; and although it is by no means correct that it was not till the latter end of the seventeenth century, that copper ore was first discovered in Great Britain, as was stated to a committee of the House of Commons in 1799, yet that appears to have been the period when mines were first set at work purposely for copper. This is corroborated by the fact, that, although a charter for making brass was granted as early as 1595, it was not until 1691 that a charter was granted (to Sir Joseph Hearne and others) for

refining and purifying copper. Another circumstance which tends to the same conclusion, is, that the copper money of Great Britain was not coined from British copper till 1717." It is clear that the steam-engine could not have been known as an instrument for drawing water, when the water-engine of Mr. Costar effected so great a change. It is probable, therefore, that the passage of Borlase, which refers to Costar's engine, was written some years previous to the publication of his book; for Mr. Carne states that the first steam-engine in Cornwall was erected on a mine which was worked from 1710 to 1714. The second steam-engine was erected at Wheal Fortune, in Ludgvan, in the year 1720; and, imperfect as that instrument probably was, its importance was quickly felt. I have a memorial from the county of Cornwall, the date of which must have been before 1730, praying that facilities might be given for the importation of coals, on account of the distressed state of the mines and the necessity of working them to a greater depth. It is curious that the plea made use of is, that the old mines were nearly wrought out, and that the whole county had been so completely searched, that there was no hope whatever that any new lodes would be discovered. The existence, therefore, of the Cornish copper mines appeared at that time to depend on the application of the new power brought into action by steam. Thus it seems, that the discovery of the power of the steam-engine in drawing water was almost coincident with the rise of the copper mines on a great scale; and its history is parallel with that of the mines themselves throughout their course.

The following observations are, in substance, taken from a paper by Mr. Davies Gilbert in the "Philosophical Transactions" for 1880.

Mr. Newcomen's engines were brought into Cornwall early in the last century, where they immediately superseded the laborious method of drawing water by human exertions, applied through the simple medium of a chain-pump, similar in construction to those at present used on board large ships. In 1769 Mr. Watt obtained a patent, which was afterwards extended to 1800; and, as in his contracts he reserved for himself a portion of the saving to be effected by the use of his invention, it became necessary to institute an enquiry into the efficiency of the engines then in existence, that the comparison might thenceforth be made. At that time the mode of computation now in use was not known, but the elements of the calculation are preserved; and, when reduced according to the present form, they give an average duty or efficiency of somewhat more than 7,000,000. To make this intelligible, the formula of the calculation must be given, which is as follows:—

"A pound avoirdupois, lifted one foot high, is assumed as the dynamic unit. The product of pounds, and the number of feet through which they are lifted in a given time, divided by the number of bushels of coal consumed in the same interval, give what is now termed the duty of an engine."

In the year 1793 an account was taken of the work performed by 17 engines on Mr. Watt's construction, and the duty was found to be 19,569,000 lbs. of water raised one foot high by the consumption of a bushel of coal. In 1800, Mr. Watt's patent expired; and in 1813, the system of regular returns from the principal engines, in what is called the duty paper, commenced. The following Table, marked I., is constructed from these papers.

I.—A Table of the Duty performed by Steam Engines in Cornwall, shewing the Average Duty of the whole for each Year, and also the Average Duty of the best Engine.

Years.	Approximate No. of Engines reported.	Average Duty of the whole.	Average Duty of the best Engine.	Years.	Approximate No. of Engines reported.	Average Duty of the whole.	Average Duty of the best Engine.
1812	24	19,456,000	26,400,000	1826	48	26,436,630	45,200,000
1814	29	20,534,232	32,000,000	1827	47	32,100,000	52,700,000
1815	35	20,526,160	28,700,000	1828	54	37,100,000	76,763,000
1816	32	22,907,110	29,400,000	1829	54	40,910,000	78,100,000
1817	31	26,502,269	41,600,000	1830	55	42,108,747	76,885,516
1818	32	26,433,783	39,300,000	1831	56	42,350,555	71,087,000
1819	27	26,252,690	40,000,000	1832	59	45,040,221	85,045,000
1820	37	28,736,398	41,300,000	1833	56	46,626,558	73,335,000
1821	39	28,223,392	43,200,000	1834	52	47,837,064	90,920,000
1822	45	28,847,216	42,500,000	1835	51	48,210,293	91,672,211
1823	43	28,156,162	43,122,000	1836	61	46,646,250	85,399,000
1824	45	28,326,140	43,500,000	1837	58	47,087,374	87,212,000
1825	50	32,000,741	45,400,000				

Respecting the methods of this progressive improvement, Mr. Gilbert makes the following observations:—"The principles, and even the mechanism of Mr. Watt's engine, have remained unaltered since their first introduction, unless a change in the precise periods of opening and closing the valves could be considered a variation. But to such an extent has the economy of fuel been carried by the use of steam at a high degree of temperature, and consequently of pressure, usually from 50 to 60 inches of mercury above the atmosphere; by extending the expansive action to $\frac{2}{3}$ and sometimes $\frac{3}{4}$ of the whole descent of the piston; by making small fire-places with sharper draughts in iron tubes surrounded by the water of the boiler*;" by more effectually preventing the escape of heat; by enlarging the engines themselves; and perhaps by executing the work with superior accuracy, that in the monthly Return of Duty performed in Cornwall, by the steam-engines in December, 1829, the best engine, with a cylinder of 80 inches, did 75,628,000, exceeding the duty in 1795, in the proportion of 27 to 7.

With respect to the effect produced in the mines by this progressive improvement of the steam-engine, two kinds of statement have been exhibited. The first, shewing cases of mines previously abandoned, but resumed with profit and effect: and the second, where the increase of power and saving of fuel have rendered profitable, undertakings which, though still continued, were sinking under the pressure of their expenses, and appeared to have reached the limit to which they could penetrate.

Mr. Taylor cites many instances illustrative of each case; and it is impossible to read these without being impressed with the conviction that the prosperity of the Cornish mines has been maintained by the constantly increasing power of the steam-engine. In fact, new powers have been developed almost from year to year, as the old methods became exhausted, and the depths attainable were worked out. Were there a limit to human ingenuity, the inference from these facts would be alarming.

Another element of power in mining has been the great improvements

* M. Jars, in 1765, speaks of pipes of smoke passing through the water in the boiler in Cornish engines.

lately made in the art of smelting. Ores producing only three or four per cent. of metal are now brought to sale and smelted, and, in some extraordinary cases, even when the produce is still smaller.

The standard is the price of cake copper, minus a fixed sum per ton of ore on the average of the ores sold at the ticketing. This sum was originally the estimated cost of smelting. About thirty years ago it was considered too small, and accordingly cake copper sold in the market at from 5*l.* to 8*l.* per ton more than the standard; but of late years cake copper has been sold at from 18*l.* to 20*l.* less than the standard—the difference being a direct and clear gain to the miner. According to the present produce of the county, the amount of saving may be estimated at nearly 300,000*l.* a year. M. Jars, in 1765, says, "No copper ore is sold under 30*s.* a ton—that is to say, ores which are not saleable at this price are not worth the expense of smelting; there are, however, some ores which sell as high as 60*l.*, but never above this price." At the last ticketing (Feb. 1839), the lowest price was 1*l.* 2*s.* 6*d.*, and the highest 14*l.* 5*s.* 6*d.*

The following Table (No. II.) will shew the average produce of the ores smelted from all the mines of Cornwall, for sixty years, and at decennial intervals.

II.—*Produce per Cent. of Ores, in Decennial Periods, from 1771 to 1837.*

Years.	Tons of Ore.	Tons of Copper.	Produce per Cent.	Years.	Tons of Ore.	Tons of Copper.	Produce per Cent.
1771	27,896	3,347	12	1801 to 1810	67,532	6,059	9
1781	28,749	3,450	12	1811 to 1820	78,560	6,602	8½
1791	Records lost.			1821 to 1830	114,040	9,143	8
1800	55,981	5,187	9½	1831 to 1837	142,785	11,637	8½

It seems reasonable to conclude that the quality of the ores found cannot have varied in the degree marked by the average produce; and that the decline has depended rather on the produce of the ores brought to the smelting-houses being always lower, as the improvement in smelting advanced. M. Jars mentions an attempt to smelt ores in the furnace of the steam-engine while heating the water in the boiler, which for obvious reasons must have failed.

Mr. Carne observes—"Another economical improvement has been made by the application of the steam-engine to draw the ore and rubbish out of the mine. These were formerly brought to the surface by the labour of horses. The difference of the expense of steam and horses for this purpose is nearly fifty per cent. From the increased number and depth of the mines, this work could not possibly be performed at present by horses." Héron de Villefosse, who probably wrote about the year 1810, says "there were then from twelve to fifteen such engines in use throughout the country." The number, of course, is now greatly increased, and it is in contemplation to apply the same machinery to raise the miners from their work, whereby a great saving will be effected in the time and powers of the men, and consequently an increase in the quantity of work, for which the same amount of wages will be paid. At the Consolidated Mines, 826 men and boys are now working at and below the 100-fathom level, at an average depth of 229 fathoms. The aggre-

gate ascent, therefore, on which bodily effort is day by day expended, is about 380,000 yards, or nearly eighty times the height of Mont Blanc. Mr. Hawkins (in vol. iv. of the "Transactions of the Cornish Geological Society") points out a further source from which the miners have obtained power over the difficulties in the way of their progress. He says—"A step no less important was gained by the introduction of the art of blasting rocks. This I believe, cannot be traced in this country higher than the beginning of the last century, which is a century later than the period of its invention in Germany. It was, most probably, first introduced into this kingdom by Prince Rupert, who must have been well acquainted with the mode of working mines in Germany, and for some years directed the Society of the Mines Royal." It is impossible to calculate the profits of adventurers in the Cornish mines, taken in long periods; but I here insert a Table, from the report above alluded to, shewing the gross amount of money received for ores, and the cost in labour and materials, for seven years, ending with the date of that report, 1799.

III.—General State of the Copper Mines in Cornwall, for Seven Years, ending 31st December, 1798.

Years.	Adventurers' amount of Ore.			Labour.			Materials.			Total Cost.			Profit.			Loss.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
1792	279,331	15	10	150,824	12	3	91,361	6	4	251,965	19	11	27,465	15	11			
1793	283,853	12	11	176,333	2	7	110,122	15	2	294,236	15	0				10,273	2	1
1794	293,853	10	11	179,187	15	5	111,093	19	11	294,775	19	5				222	8	6
1795	305,320	6	9	189,713	10	1	111,640	2	3	312,047	7	5				6,727	0	8
1796	342,826	12	11	201,995	18	6	105,925	12	1	324,897	18	4	23,938	14	7			
1797	320,606	15	9	189,821	15	11	109,008	7	3	309,060	14	10	11,546	0	11			
1798	405,488	15	9	252,601	12	3	146,253	16	3	403,248	7	11				2,739	12	2
	2,237,291	10	10	1,341,478	7	0	785,405	19	3	2,195,123	2	10	62,950	11	5	20,782	3	5
	Net profit for seven years £42,168. 8s. 0d.																	

The yearly value of ores in this Table does not agree with the amounts in another Table, which I shall afterwards give, of the produce of the copper mines since 1770, because, in the former, the portion of ores paid to the landlords as dues is not included.—At this time Mr. Vivian, who gave evidence before the Committee, divided the mines then at work into three classes, and computed the results of their cost and produce for the six months preceding, as follows:—The first class comprised the old deep mines, producing more than half the copper then raised in Cornwall; they are ten in number. The second class included profitable mines, producing three-eighths of all the copper; they are seven in number. The third class consisted of forty-two comparatively new mines, carried on in the hope of future profit.—See Table IV.

IV.—The three Classes of Mines, referred to by Mr. Vivian, are tabulated in this form.

	Copper.	Ore Sold.	Current Cost.	Profit.	Loss.	Capital in Mines.	Loss unrecovered.
	Tons.	Tons.	£.	£.	£.	£.	£.
First Class . .	1,389	115,121	116,209	3,153	4,240	102,489	69,181
Second Class . .	1,083	86,377	49,311	27,066	..	66,813	6,423
Third Class . .	141	14,517	31,813	..	17,295	16,267	90,124
	2,613	216,017	197,333	40,219	21,536	185,569	164,789

I believe, however, that the accuracy of these Tables cannot be entirely relied upon—many sources of error exist, and some omissions; and it must be borne in mind that the Tables were constructed to meet an attempt by the manufacturers of Birmingham to fix a maximum price for copper. The rate of gaining to losing mines is stated to have been 11 to 63; and Mr. Vivian computed the number of working men engaged in copper mines at from 5000 to 6000; the women and boys being 4000 or 5000—making, with their families, between 30,000 and 40,000 souls. Birmingham at this time consumed annually from 1000 to 1500 tons of copper.

Pryce states, that from 1726 to 1735 the average annual produce of the county of Cornwall was, in ores, 6000 tons, producing probably 800 to 1000 tons of copper; and that in 1770, the quantity of ore had increased to 27,000 tons, which yielded 3200 tons of copper.

The Tables marked V. and VI. shew the produce of the county in copper and money since 1770.

V.—An Account of the Annual Produce of the Copper Mines of Cornwall, from the year 1771 to 1800 inclusive.

Years.	Tons of Ore.	Tons of Copper.	Value.	Standard.	Years.	Tons of Ore.	Tons of Copper.	Value.	Standard.
			£.	£.				£.	£.
1771	27,896	3,347	189,609	81	1786	29,895	4,787	237,237	75
1772	27,965	3,356	189,505	81	1787	28,047	..	190,733	..
1773	27,663	3,390	148,421	70	1788	31,541	..	150,303	..
1774	30,254	3,630	169,000	68	1789	33,231	..	184,333	..
1775	29,966	3,596	199,000	78	1790	..	..	..	..
1776	29,423	3,532	191,590	79	1791	..	..	..	..
1777	29,916	3,886	177,000	77	1792	..	..	..	..
1778	24,706	2,965	140,536	72	1793	..	..	..	..
1779	31,115	3,784	180,906	78	1794	43,816	..	230,875	..
1780	24,433	2,922	171,231	68	1795	43,899	..	226,189	..
1781	28,749	3,450	178,789	77	1796	43,813	4,960	256,664	..
1782	28,122	3,375	152,434	70	1797	47,909	5,210	277,636	..
1783	28,729	4,296	219,987	76	1798	51,258	5,600	423,632	..
1784	26,601	4,392	209,123	73	1799	51,273	4,923	469,664	121
1785	26,969	4,434	205,451	71					

VI.—An Account of the Copper produced from the Mines in Cornwall, from 1800 to 1837.

Years.	Quantity of Ore.	Copper.	Value of Ore.	Produce	Standard	Years.	Quantity of Ore.	Copper.	Value of Ore.	Produce	Standard
	Tons.	Tons.	£.	£.	s.		Tons.	Tons.	£.	£.	s.
1800	55,981	5,187	530,925	9-25	133 3	1819	88,736	6,804	623,595	7-625	127 10
1801	56,611	5,267	476,313	9-25	117 5	1820	91,473	7,508	602,441	8-125	113 15
1802	53,937	5,228	445,094	9-625	110 18	1821	98,426	8,514	605,968	8-625	103 0
1803	60,566	5,615	533,910	9-25	122 0	1822	104,523	9,140	663,085	8-75	104 0
1804	64,637	5,374	507,840	8-375	136 5	1823	95,750	7,927	608,033	8-25	109 18
1805	78,452	6,234	862,410	7-875	169 16	1824	99,700	8,823	587,178	7-875	110 0
1806	79,269	6,863	730,845	8-625	138 5	1825	107,454	8,226	726,353	7-625	124 4
1807	71,694	6,716	609,002	9-375	120 0	1826	117,308	9,026	788,971	7-625	123 3
1808	67,867	6,795	495,303	10-	100 7	1827	126,710	9,031	745,178	8-125	106 1
1809	76,245	6,921	770,028	8-875	143 12	1828	130,366	9,921	756,174	7-625	113 7
1810	66,048	5,682	570,035	8-5	132 5	1829	124,502	9,656	717,334	7-75	109 14
1811	66,786	6,141	556,723	9-125	120 12	1830	135,665	10,890	724,000	8-	106 0
1812	71,547	6,730	549,665	9-375	111 0	1831	146,502	12,218	817,740	8-375	99 18
1813	74,047	6,918	594,345	9-25	115 7	1832	139,057	12,099	835,812	8-75	104 14
1814	74,322	6,369	627,501	8-5	130 12	1833	138,300	11,185	838,708	8-	110 0
1815	78,493	6,525	552,813	8-25	117 16	1834	143,296	11,234	887,902	7-75	114 4
1816	77,334	6,697	447,959	8-625	98 13	1835	150,607	12,271	896,401	8-125	106 11
1817	76,701	6,498	494,010	8-5	108 10	1836	140,981	11,639	957,752	8-25	115 12
1818	86,174	6,843	686,005	7-875	134 15	1837	140,753	10,823	908,613	7-625	119 5

For the reasons above stated, the rate of wages in copper mines cannot be determined previously to the commencement of the last century; but an old manuscript book, entitled the "Bailiff of Blackmore," speaks of the wages of tanners; and they may be taken as the rate of wages amongst the miners generally. The writer says—"the most part of the workers of the black tyn and spaliers are very poor men, as no doubt that occupation can never make them rich; and chiefly such tyn workers as have no bargains, but only trust to their wages, although they have never so rich a tyn worke; for they have no profit of their tyn, if they be hyred men, saving only their wages, for their masters have their tyn. Now, if they should chance to be farmers themselves, and their worke fall bad, then run they most chiefly in their masters' debts, and likely to increase more and more, rather than to requite any part thereof; for of these two choyses, to be a hyred man or a farmer—the one is a certaintie, and the other an uncertaintie. The farmer knoweth not how his worke will doe, until tyme that he hath proved it, and must needs live in hope all the yere, which for the most part deceiveth him (as the saying is), *Qui spe vivit, nusquam agit vitam*. Then on the other part, concerning the wages of the tynner working his dole, the common wages is but ijd., or five marke, a dole's working for a yere to the uttermost. Yet must the worker find himself meat and drinke, which is little above ijd. a day. This poor man, happily, hath a wife and iiij or v small children to care for, which all depend upon his getting—whereas all his wages is not able to buy himself bread. Then, to pass over the poore man's house—rent, cloathing for his poore wife and children, besides divers other charges daily growing upon them! O, God, how can this poore man prosper. Yet this much, I confess, of the wealthiest of tynners, which happily work together in one tynworke with the poore man, they are very charitable and merciful towards their poore fellow-workers; for at dinner time, when they sit down together beside their tynworke, in a little lodge made up with turfs covered with straw, and made about with handsome benches to sit upon, then every tynner bringeth forth out of his scrip or tyn bagges, his victuals, his bread, his bottle of drinke, as the rich tynners will lack none of them being left in number; then is their charitie so great, that if one, two, or three, or else more poore men sit among them, having neither bread, drinke, or other repast, there is not one amongst all the rest but will distribute at the largest sorte with their poore workfellows which have nothing—so that, in the end, this poore man, having nothing to relieve him at the worke, shall in fine, be better furnished of bread, cheese, butter, beefe, porke, bacon, than all the richest sorte," &c.

The foregoing extract, which is curious not merely with reference to the amount of wages paid, but also to the habits of the miners and the articles of their food, describes the state of the tanners in the time of Queen Elizabeth, I believe near the commencement of her reign.

In the debate on monopolies, in 1601, Sir Walter Raleigh, then Lord Warden of the Stannaries, used these words:—"Now I will tell you, that before the granting of my patent, whether the tin was but at 17s., and so upwards to 50s. a cwt., yet the poor workman never had but two shillings a week, finding himself. But, since my patent, whoever will work, be tin at what price soever it may, they have 4s. a week truly

paid; there is no poor that will work there but may, and have, that wages."—Sir W. Raleigh's patent was in 1585; hence it appears that wages had been doubled since the former period alluded to by Sir Walter Raleigh, and quadrupled since the time of the "Bailiff of Blackmore."

Carew observes—"The hirelings stand at a certain wages, either by the day, which may be about 8d., or for the year, being between 4 and 6 pound, as their deserving can drive the bargain; at both which rates they must find themselves." I can make nothing of this statement, because Carew wrote nearly at the time when Sir Walter Raleigh spoke, and he gives the rate of wages at double the amount stated by Sir W. Raleigh, who must have known the truth, as being personally concerned. Moreover, "4 or 6 pound for the year" is only 3d. or 4½d. per day, and not 8d., as stated by Carew. Tomkin, in his note on the above, describes the state of the working miner, in 1739, in the following terms:—"The common way of agreeing with the workmen is by the month, which is from 20s. to 27s. to the best workman; besides which they have stemmings, as they call it, in all the great works, for which they have so much a stem, as they can agree for; that is, for so many hours beyond their ordinary allotment, either drawing water, work, or attle, and all the tools, new setting, and steeling them, materials, &c., are found and provided at the charge of the owners. The captains have 30s., 40s. or 50s., nay, sometimes 4l. per month. The binders likewise, that is, the carpenters who take care to secure the shafts, adits, and workings, by laying beams, dams, planks, &c., have considerable wages, few less than 40s. or 50s. per month." The tools in use in the year 1671 are thus described in a paper in the "Philosophical Transactions" of that year:—"A bele, or Cornish tubber, of double points, of 8 or 10 lbs. weight, sharpened at both ends with steel, and holed in the middle. It may last in a hard country half a year, but must be new pointed every fortnight at least. A sledge (flat-headed) from 10 to 20 lbs., will last seven years, but must be new ordered once a quarter. Gads, or wedges, 2 lbs. weight, and four inches square, and steeled at the point, will last a week, but must be sharpened every two or three days." Ladders and wheel-barrows.

The above extracts relate to a period extending from the commencement of the reign of Queen Elizabeth to the year 1740. During the whole of this time, though the price of wheat was occasionally much elevated or depressed, the quinquennial averages generally ranged between 32s. and 45s. per quarter, and were lower at the latter part than at the commencement of the period. Thus the gradual rise in the wages of the miners may be taken as an indication of improvement in their condition.—See Table VII.

VII.—Price of a Quarter of Wheat on the Average of Five Years.

Years.	Shillings.	Years.	Shillings.	Years.	Shillings.	Years.	Shillings.
1565	42	1610	34	1655	41	1700	50
1570	42	1615	34	1660	40	1705	30
1575	45	1620	34	1665	46	1710	33
1580	43	1625	35	1670	32	1715	44
1585	48	1630	34	1675	38	1720	33
1590	49	1635	45	1680	42	1725	29
1595	46	1640	34	1685	35	1730	39
1600	64	1645	40	1690	27	1735	25
1605	27	1650	53	1695	40	1740	32

The present state of wages near Redruth, St. Austell, and Penzance (the three principal *foci* of mining), is given in Table VIII.; and it is worthy of remark, that in places distant from each other only a few miles, the rate of wages sometimes differs largely, and for long periods. I can explain this only by the known fact of the attachment of the Cornish miner to his own home.

The returns in the Tables VIII. IX. and X. relate to three different classes of labourers, and the three modes by which their wages are paid:—

1. *Daily Labourers*.—The work on the surface is, to a great extent, done for daily wages, which are regulated by the circumstances of the times, as in other callings.

2. *Tutwork men*, who are paid by the piece, and contract for their work by the fathom.

3. *Tributers*, the most considerable class.

VIII.—Rate of Wages per Month in 1837.

	West of Penzance.	Midland District, &c.	St. Austell District, &c.	Average.
	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
Tributers . . .	47 6	68 0	59 0	58 2
Tutworkmen . . .	45 0	57 2	59 0	53 8
Day Labourers . . .	43 0	41 0	45 0	43 8

The numbers of each class are nearly equal.

IX.—Persons employed in the Consolidated Mines and in Fowey Consols.

	Consolidated Mines.	Fowey Consols.
Agents . . .	20	20
Tributers . . .	392	320
Tutworkmen . . .	441	420
Boys underground . . .	109	..
Day Labourers ditto . . .	..	110
Day Labourers on surface . . .	236	187
Boys on surface . . .	337	315
Women and Girls . . .	755	308
Total . . .	2,387	1,680

X.—Scale of Wages paid at the Consolidated Mines for 1836.

	Per Month. <i>£.</i> <i>s.</i> <i>d.</i>
Tutworkmen . . .	3 11 6
Tributers . . .	4 5 0
Surface Labourers . . .	2 6 0
Women and Girls above 17 . . .	0 18 0
Girls from 14 to 17 . . .	0 15 0
Girls from 12 to 14 . . .	0 12 0
Girls from 9 to 12 . . .	0 8 0
Boys above 12 . . .	0 13 0
Boys below 12 . . .	0 9 0

Mr. John Taylor, in a lecture delivered to the Society of Arts in March, 1837, describes the present customs in the following manner—“There are two kinds of contract entered into with the men, by one of which they are paid for cutting through rocks generally unproductive of ore, or where the procuring it is not the principal object, and these payments are according to the measured quantity excavated. The other, which is called ‘tribute,’ is an agreement by which the men working on ore ground are to be remunerated by a portion of the produce, rendered on the surface in a marketable state. Of the first kind of contract I shall say little, because there is nothing essentially different from bargains similarly made in all kinds of work. But I may remark on one feature

common to all the agreements made with the men in the Cornish mines ; which is, that they are for short and regular periods, that is to say, for one or two months, and that the mode of letting is by the kind of auction alluded to by Mr. Babbage, by which every bargain is open to full and fair competition. The rate of wages, therefore, regulates itself by the circumstances that ought to control it—the demand for labour. No one has heard of disagreements between the Cornish miners and their employers ; no combinations or unions on the one side or on the other exist, nor have turn-outs or strikes been attempted or contemplated.”

Mr. Babbage says of this system, “that no other mode of payment affords to the workmen a measure of success, so directly proportioned to the industry, the integrity, and the talent which they exert.” I have only to add, that the bidding is usually concluded by throwing up a stone ; and the man who bids last, before the stone touches the ground, is master of the work. A very full account of these auctions is given in the *Mining Journal* for June 11, 1836.

With respect to the mode in which the work in mines is set and bargained for, I find the following account in a paper, which was read before the Académie Royale des Sciences, at Paris, in 1765 ; it is by M. Jars, who seems to relate from personal observation, and it has been published in the third volume of his “*Voyages Metallurgiques*.” I give it because it accords very nearly with the customs now in use, and shews that the system on which Mr. Babbage has bestowed his just commendation is of no recent date. He says, “The established custom in all the mines of this province (Cornwall), is to set the work to be done to certain contractors, who, by themselves or by labourers employed by them, extract the ores. The day being fixed beforehand, those who are interested in the mine, or their agents, assemble, and the contractors make their offers, bidding downwards (*en rabais*). The extent of each bargain is called a ‘pitch,’ and is usually fifteen, twenty, or twenty-four fathoms of level (the distance of one winze from another), and seven fathoms in depth. The period of each bargain is always four months, and the workmen provide themselves with all tools, candles, and gunpowder. The contract is determined by a portion of the minerals extracted, that is to say, the contractors receive one-third, one-fourth, one-fifth, &c. of the value raised, according to the terms of the agreement. In the tin mines they receive the portion in ore, but in the copper mines in money. From the nature of the bargain, there is evidently a great risk to the contractors, who sometimes make a profit, and at others incur loss. But it is otherwise with the adventurers, who, whatever may be the bargain, make some profit on their portion of the ore. Therefore it is, that though the contractors have a right to continue their work for four months, and the adventurers cannot break the bargain during that time, still, if the work should turn out ill, the contractors, after having worked for a month, are at liberty to relinquish their pitch, on the payment of 1*l.* sterling for each workman in their service. This custom is generally observed.”

M. Jars thus describes the sale of ores at the ticketings—“The adventurers or their agents dine together at the expense of the Lord (*au frais du seigneur*). While they sit round the table, each person gives in his ticket, offering a certain sum, from 3*l.* to 6*l.*, for so many tons of ore.

The tickets are then read with a loud voice, and the persons present make a note of the prices offered. It is impossible to conceive a better or fairer mode of sale, and the bargains thus made are never disputed." This form of proceeding at the sales, and the above-described method of setting the work to the men, are characteristic of the Cornish mines; and we have the authority of M. Jars to prove, that the customs in use above seventy years ago have not very materially varied up to the present day.

It may seem strange that I should refer to foreign authors respecting these customs; but, in truth, people do not describe what is always before their eyes, and known to their neighbours as well as themselves. A stranger sees and records what a native presumes to be notorious.

Many of the following Tables are founded on the transactions of two mines only, but they are very important mines, producing about one quarter of the copper of the county. I have thought that to give an insight into the system of working the Cornish copper mines, the various interests at work, and their combined effect on the population and wealth of the county, no better illustration could be adopted than one which partakes so much of the life and reality of a portrait; moreover, this method has enabled me with some sort of probability to deduce relatively the value and amount of things respecting which it is quite impossible to obtain an actual return. With respect to wages, for instance, no industry would have enabled me to collect the actual sum; but I think it may, in some measure, be inferred from a comparison between the wages paid and the value of the ores returned by these two mines, assuming the same relation to exist between the total value of ores and labour throughout the county. Thus, I imagine that the total wages paid in the copper mines of Cornwall, in the year 1836, could not be far from 482,000*l*.—See Table XI.

XI.—Ratio of Wages and Salaries to Gross Expenditure and Gross Receipt from Ores, in 1836.

Mines.	Ratio of Wages and Salaries to	
	Gross Expenditure.	Gross Receipt from Ores.
Consolidated Mines . .	·678 to 1	·470 to 1
Fowey Consols . . .	·777 to 1	·561 to 1
Average . .	·785 to 1	·510 to 1

The value of ores raised in these mines being 243,712*l*., and the wages and salaries 182,786*l*.; and the total value of copper ores in the county, in the year 1836, having been 967,752*l*.; the amount of wages and salaries paid in all the copper-mines of Cornwall, according to the same ratio, will have been 482,116*l*.

I have analysed the accounts of these two mines, and have given a statement of their expenditure in detail; of the quantity and value of each kind of material consumed; and of the proportional cost of each to the other items, and to the gross expense of working the mine. For this purpose I have taken the total cost as unity, and have given to each item its value by a decimal fraction (Table XII).

XII.—Quantity and Value of Coals, Iron, Debenture Timber, and Gunpowder, consumed in 1836, in the Consolidated Mines and Fowey Consols; and Ratio of the same to the Gross Expenditure (except dues).

	Consolidated Mines.			Fowey Consols.		
	Quantity.	Value.	Ratio to Unity.	Quantity.	Value.	Ratio to Unity.
Gross Expenditure . . .	..	£. 109,007	..	..	£. 69,419	..
Coals . . . Tons	11,817	11,619	·1139	1,301	1,290	·0185
Iron, Steel, and Castings . . . £	..	3,315	·0394	..	3,065	·0441
Debenture Timber . . . Loads	922	2,397	·0235	918	2,386	·0243
Gunpowder . . . lbs.	64,000	1,408	·0138	66,500	1,460	·0285

* This mine has a great command of water-power.

In another Table I have given a similar statement, founded on a comparison with the total value of ores, which in like manner I have reduced to unity (Table XIII).

XIII.—Analysis of Proceeds and Expenditure of the Consolidated Mines, near Redruth, and of Fowey Consols, near St. Austell, for the year 1836.

		Gross Receipt.				Gross Receipt.	
Consolidated Mines		£145,716		|		Fowey Consols	
						£97,996	

Assuming the gross receipt as unity, the expenditure and profit may be expressed thus:—

	Consolidated Fowey			Consolidated Fowey	
	Mines.	Consols.		Mines.	Consols.
Lords' dues	0·043	0·056	Materials	0·103	0·146
Agents	0·032	0·013	Engine and Water-cost	0·106	
Tutworkmen	0·180	0·166	Tributers	0·170	0·250
Surface Labour, Ores,	0·077	0·106	Sundries	0·018	0·012
Carriage			Balance, profit	0·259	0·235
Carpenters, Masons,	0·021	0·016	Small Fractions	1	..
Smiths, &c.			Total	1·000	1·000

Here I have compared the total distribution of the proceeds, including landlords' dues and profits to the adventurers, together with the outlay for the various kinds of labour and materials (Table XIV).

XIV.—Materials used in the Consolidated Mines and Fowey Consols, in 1836.

		Consolidated.	Fowey Consols.			Consolidated.	Fowey Consols.
Coals . . . Tons	11,817	1,301	192 Hides of Leather . . . lbs.	8,996	2,352		
Candles . . . lbs.	113,916	72,000	Patent half-inch Chain . . . Fms.	2,474	700		
Gunpowder . . .	64,000	66,500	Pick and Shovel . . . Doz.	13,098	664		
Debenture Timber . . . Feet	49,091	45,928	Hills . . .				
Iron, of various sizes . . . Tons	108	90	Nails, &c. . . Bags	91	53		
Yellow Pine . . . Feet	2,129	1,376	Engine Shag, &c. . . Yards	3,438	700		
American Oak . . .	..	703	Oil . . . Galls.	996	916		
Steel, of various descriptions . . . Cwt.	135	91	Safety Rods in } Blasting . . . }	£ 263 10 0	475 4 2		
Tallow . . .	..	375	Foundry Bills for } Pumps . . . }	£1,735 0 1	1,775 4 2		
Flat and Round Ropes . . .	..	977	Books, Stationery . . .	£ 50 6 7	52 5 4		

After all, however, though these Tables may be accurate as records of facts belonging to their own subject, the inferences derived from them respecting the mines generally, can be but approximations, and I have on all occasions had recourse to positive information when it could be obtained.

Now, as to the wages of 1837. I have already computed those of 1836 at 492,116*l*. But I have been told that the wages of last year were about fifteen per cent. below the rate of the year before; therefore, the wages of 1837 will, by this computation, have been about 409,700*l*. Again, in Table XV. will be found an account of the transactions of the Consolidated Mines for fourteen years; and it is there shown that the ratio of wages to ore, was, throughout the period, as 3*l*. sterling of wages to one ton of ore. Now, the ore of the county last year was 140,753 tons; the wages, therefore, were probably about three times that number of pounds, or 422,259*l*. The mean of these two sums, 409,700*l*. and 422,259*l*., is 415,979*l*. I assume, then, that the wages of last year were about 416,000*l*. in the copper mines, and the tin and copper mines in respect of copper.

XV.—Transactions of the Consolidated Mines for Eighteen Years.

Years.	Capital and Compound Interest.	Cost.	Lords' Dues.	Value of Ores.	Tons of Ore.	Wages.
	£.	£.	£.	£.		£.
1819	15,967	..	..	..	..	..
1820	36,644	..	..	..	..	..
1821	18,223	..	..	..	..	..
1822	3,506	..	..	..	..	..
1823	3,479	69,836	3,478	83,488	11,532	43,716
1824	13,001	84,081	4,584	110,036	14,980	47,885
1825	2,768	95,451	4,971	119,312	13,379	53,275
1826	1,985	82,865	3,848	92,355	12,872	43,200
1827	1,736	81,222	4,108	93,601	13,637	41,429
1828	1,199	69,825	4,012	96,313	12,262	37,568
1829	340	68,177	3,672	88,171	12,578	38,183
1830	Capital repaid.	69,897	3,795	91,092	13,513	39,304
1831	..	75,220	4,310	103,451	15,222	43,410
1832	..	83,472	4,791	115,000	15,670	47,051
1833	..	89,606	5,967	143,227	18,191	51,844
1834	..	88,956	5,652	125,670	20,022	48,690
1835	..	90,216	5,607	134,574	19,619	53,787
1836	..	102,007	6,071	145,717	18,499	61,257
					214,045	644,699

Now, as to the number and description of persons employed. First, we have the enumeration in Tables XVI. and XVII., which, though not entirely complete, is the best criterion to which I can refer. But it includes all mines, tin and lead, as well as copper; and, as tin and copper are often wrought out of the same mine, I have not been able to distinguish the number of persons employed in each separately.

XVI.—Enumeration of Persons in Fifty-nine Mines.

MINES.	Men.	Women.	Children.	Total.	MINES.	Men.	Women.	Children.	Total.
North Rookear . . .	300	190	150	640	Wheal Reeth . . .	147	13	66	226
South Rookear . . .	148	172	60	380	Balnoon . . .	62	6	13	80
Binner Downs . . .	250	100	40	390	Bowaswell Downs . . .	122	5	50	246
Trewavas . . .	102	43	17	161	Wheal Mary . . .	113	14	31	168
Great St. George . . .	255	35	50	340	Stray Park . . .	137	30	23	189
Wheal Leisure . . .	68	6	21	95	Dolcoath . . .	340	230	70	690
Wheal Prudence . . .	40	20	13	73	East Wheal Crofty . . .	456	404	144	1004
Wheal Virgin . . .	167	184	91	392	East Pool . . .	111	82	18	211
Wheal Buller . . .	83	42	20	155	Wheal Friendship . . .	85	19	11	115
Wheal Busy . . .	24	50	28	112	Wheal Prosper . . .	68	6	6	80
Levant . . .	280	44	186	550	Wheal Darlington . . .	215	50	52	317
Perran Consols . . .	80	14	6	100	Rospeath . . .	42	4	6	52
Consols and United } Mines . . .	1730	869	597	3196	Great Wheal Fortune . . .	165	15	27	207
East Criblands . . .	194	46	62	239	Trevaskus . . .	108	30	11	144
Pembroke . . .	75	12	52	139	Trevarthen Downs . . .	6	7	3	16
Wheal Gorland . . .	83	12	21	96	Owen Vean . . .	62	4	6	72
Wheal Damsel . . .	23	1	11	40	Penberthy Crofts . . .	21	3	2	27
Wheal Providence . . .	61	8	24	93	Providence . . .	83	19	20	133
Wheal Harriette . . .	21	8	4	33	East Wheal Straw- } berry . . .	71	19	30	120
Wheal Maideu . . .	15	11	11	37	Holmbush . . .	145	8	25	191
Unity Wood . . .	206	80	132	424	St. Austell Hills . . .	72	13	24	109
Carharrack . . .	42	24	20	96	North Clase . . .	7	1	1	9
North Downs . . .	16	3	5	24	Rocks . . .	74	9	12	95
Cardew . . .	24	6	10	40	Carrygian Roche . . .	30	1	4	35
Fowey Consols and } Launceston . . .	1037	306	315	1660	Charlestown . . .	431	120	263	814
Great Work . . .	222	46	74	418	Polberran . . .	362	34	22	478
Morvah and Zenon . . .	85	2	22	115	Wheal Colt . . .	8	4	4	16
Gwollon . . .	100	16	20	136	Polgooth . . .	141	10	51	202
Tredarva . . .	8	3	5	16	Wheal Vor . . .	592	237	255	1174
St. Ives Consols . . .	237	16	60	313	Total . 59 Mines.	10,624	3802	3490	17,916

Let us try what can be done by calculation. In the two mines so often referred to there were, in 1836, 4067 persons—2362 men, and 1705 women and boys—employed to raise 32,500 tons of ore. Table XVI. shews the result of an actual enumeration in fifty-nine mines (from all of which I have the returns complete), distinguishing the sexes.

It gives a return of 10,624 men, and 7292 women and children; these numbers relatively agreeing very closely with the above numbers employed in the two mines. I have some confidence, therefore, in the opinion, that the relative numbers of men to women and children throughout the county does not differ materially from those of the fifty-nine enumerated mines. Now, the total wages of last year having been 416,000*l.*, and the average per head having been 2*l.* 11*s.* 6*d.* for the men, and 1*s.* 6*d.* for the women, per month (see Tables VIII. and X.), and the relative proportion of men to women being as 10,624 to 7292, we have the terms from which to calculate the number of persons employed in 1837. The result is 19,035 persons, of whom 11,282 were men, and 7743 women and boys. This refers only to the copper mines, and the tin and copper mines in respect of copper. Tables XVI. and XVII. shew the population of the mines generally; some mines, I know, have been omitted, and perhaps it may be nearly correct to take the whole population at work to be 28,000 persons. The Tables give a total of 27,028 persons belonging to 160 mines.

XVII.—Supplement to Table XVI.

Mines.	Men.	Women.	Children.	Total.	Mines.	Men.	Women.	Children.	Total.
Wheal Ann . . .	..	..	..	191	Wheal Mary & Parent	..	..	..	30
Wheal Andrew . . .	7	..	2	9	Wheal Maitland . . .	30	..	6	36
Wheal Agar . . .	..	..	..	55	Wheal Millpool . . .	..	..	3	30
Wheal Amelia . . .	4	..	..	4	South Wheal Mary . . .	11	..	..	14
Bell . . .	..	..	..	6	Marazion Mines . . .	222	83	96	401
Boscon . . .	65	..	24	89	Wheal Neptune . . .	4	..	..	4
Boscon . . .	16	..	4	20	Wheal Owles . . .	110	..	21	131
Baldns . . .	5	..	1	6	Wheal Osborns . . .	40	6	6	52
Ballowall . . .	27	..	9	36	Wheal Prosper . . .	10	..	4	14
Wheal Bodnick . . .	99	41	32	172	Wheal Pye . . .	3	2	1	6
Wheal Brothers . . .	2	..	..	2	South Polgooth . . .	92	14	20	126
Wheal Bolton . . .	64	6	..	70	Perran Downs . . .	41	..	..	41
Wheal Barnes . . .	..	..	..	22	Pentuan Stream . . .	18	..	5	23
South Wheal Bassett . . .	..	..	..	230	Phoenix (Padetow) . . .	13	..	1	14
East Wheal Bassett . . .	..	..	..	100	Polbreen . . .	80	..	..	80
Cornwall Great United . . .	155	90	22	197	West Poldice . . .	..	..	..	30
Carclaze . . .	8	..	6	14	Relistian . . .	188	67	45	250
Carn Brea . . .	517	187	69	723	Redmoor Consols . . .	110	16	25	151
Camborn Consols . . .	4	..	..	4	Wheal Rome . . .	..	..	..	8
Copper Valley . . .	4	..	1	5	Wheal Rose . . .	4	..	..	4
Copper Bottom . . .	43	21	8	72	South Rose . . .	29	..	12	41
Cook's Kitchen . . .	..	..	..	247	Spearne . . .	..	..	..	70
Wheal Chiton . . .	4	..	1	5	Streamers (Canon) . . .	144	2	66	212
Wheal Curtis . . .	..	..	..	60	Wheal Speed . . .	10	..	..	10
Wheal Change } (Lancet) . . .	..	..	..	40	Wheal St. Just . . .	2	..	..	2
Wheal Charles . . .	..	..	..	10	Wheal Sarah . . .	12	..	..	12
Wheal Clarence . . .	..	..	..	10	Wheal Sparrow . . .	..	..	..	31
West Cliff Down . . .	6	..	..	6	Wheal Seaton . . .	..	..	..	50
East Cornwall . . .	6	..	..	6	Wheal Sisters . . .	..	..	..	4
Craigbrows . . .	26	5	10	41	Tresavean . . .	..	..	..	1354
West Dolcoath . . .	4	..	1	5	North Tresavean . . .	..	..	..	..
East Downs . . .	6	..	2	8	Trevenen . . .	..	..	..	30
Wheal Ellen . . .	..	..	..	220	Trethellan . . .	..	..	..	77
Wheal Fire . . .	6	..	..	6	Tresavara . . .	25	8	..	33
Wheal Friendship . . .	4	..	..	4	Turnavoore . . .	4	..	1	5
Wheal Fancy . . .	..	..	..	8	Trebilzue . . .	19	..	..	19
Friendly . . .	8	2	2	12	Tincroft Consols . . .	..	..	..	209
Gunnis Lake . . .	62	7	19	88	East Tincroft . . .	..	..	..	4
Godolphin . . .	270	70	40	480	West Tincroft Consols . . .	33	..	4	37
Globe . . .	2	..	2	4	North Twan . . .	..	..	..	90
Gurnett's Head . . .	94	..	..	94	Wheal Triumph . . .	10	..	2	12
Wheal Gray . . .	..	..	..	130	Wheal Treasure . . .	5	..	3	8
Hallamanning and } Retallack . . .	..	..	..	10	Wheal Trumpet . . .	..	..	..	60
Hallenbeagle . . .	122	20	50	192	Wheal Trenwith . . .	23	6	20	109
North Hallenbeagle . . .	20	6	4	30	Wheal Trevannance . . .	12	..	..	12
Wheal Julia . . .	100	26	22	148	Wheal Tamar and } South Hooe . . .	23	6	21	110
Wheal Jewel . . .	212	53	24	289	West Wheal Tamar . . .	..	..	..	45
West Wheal Jewel . . .	79	10	25	114	United Hills . . .	269	90	..	359
Wheal Kitty . . .	118	52	28	198	Wheal Ury . . .	..	..	..	146
Levant Consols . . .	..	..	..	20	Wheal Vyryan . . .	54	25	24	103
Wheal Martha . . .	26	10	4	40	Total . 160 Mines.	..	..	..	27,028

Before quitting this subject, I will just notice that during the same fourteen years alluded to, the total ores of the county were 1,796,198 tons, or 128,300 tons per annum on the average; therefore the average annual wages will have been 384,900*l*.

Héron de Villefosse, whose book was published in 1819, but whose information respecting Cornwall seems to have been gathered some years earlier, says that the labourers in all the mines of the county were about 14,000, and with their families comprehended a population of 60,000 persons. The return for the miners' militia, raised exclusively from the mines, might at that time be appealed to: but as he gives no authority for his estimate, it rests at present on his own con-

jecture. He estimates the capital engaged in the mines at 350,000*l*. I have no means of estimating the total capital employed at present; but the outlay and repayment of capital in the Consolidated Mines will be found in Table XV.

I have now only a few desultory remarks to make on subjects which have not found a place in the preceding observations. The speed of sinking in mines varies greatly according to the local circumstances, the nature of the work, and the quality of the rock. Thus, in Wheal Reeth, only twenty fathoms were sunk from 1828 to 1834, or between three and four fathoms per annum. This was from the 160 to the 180 fathom level below the adit, and in granite. In the Levant mine, from 1830 to 1837, ninety fathoms were sunk; at the rate of thirteen fathoms per annum. This was from the 110 to the 200 fathom level, and in greenstone. In East Wheal Crofty, from 1833 to 1837, seventy-seven fathoms were sunk, from the 43 to the 100 fathom level; at the rate of fourteen fathoms per annum. This was also in greenstone.

Héron de Villefosse computes the consumption of coal at the mines at about 60,000 tons; and I think he must have been near the truth. Mr. Carne calculates that in 1834 the total consumption of coal by all the engines, of every description, was 69,559 tons. Thus, if the engines now in use were not more efficient than those of 1814 (about the time when Héron de Villefosse wrote), the work now done would require 168,745 tons of coal; so that there is a saving of 99,186 tons, which at 17*s*. per ton (including carriage), is equal to 84,000*l*. per annum.

Table XIX. shews the total consumption of coal by the reported engines in the year 1837.

XIX.—*Coals Consumed by the Engines reported by Captain Leun's Duty Paper.*

Months. 1837.	Drawing Water.		Stamping and Drawing Ores.	
	No. of Engines.	Bushels of Coal consumed.	No. of Engines.	Bu- shels of Coal consumed.
January . .	60	98,075	19	8,453
February . .	62	115,399	21	10,081
March . . .	62	114,690	21	10,571
April . . .	60	102,775	20	10,943
May	61	82,176	18	9,474
June	60	92,994	19	10,340
July	60	84,791	19	8,475
August . . .	59	81,273	17	8,227
September .	59	87,517	17	8,150
October . .	57	76,297	17	7,711
November .	55	78,551	16	8,085
December .	55	79,546	17	9,499
Total . .	710	1,094,015	221	108,019
Average .	60	108,019	18	
	18	1,202,034		
Total Engines	78			
1,202,034 Bushels of Coals, weighing 83 <i>lb</i> s. per Bushel, are equal to 49,906 Tons.				
		Engines.	Coals Consumed.	
Brought down . . .		78	49,906 tons.	
Second Duty Paper . .		11	6,954	
Average No. of Engines		59	56,860	

Table XX. exhibits the water discharged by the same engines in the same year.

XX.—Water Discharged in 1837 by the Engines reported in the Duty Paper.

Months.	No. of Engines.	Galls. per Min.	Months.	No. of Engines.	Galls. per Min.
January . .	68	17,143	August . .	59	13,866
February . .	63	18,915	September . .	59	13,221
March . .	64	17,598	October . .	57	12,188
April . .	58	15,605	November . .	57	12,293
May . .	63	15,422	December . .	56	12,691
June . .	60	15,152			
July . .	60	14,634			
			Total . . 178,994=31,141,800 { tons for the		
			By Second Duty Paper, 11 Engines . . 5,758,912 tons,		
			Total 36,900,712 tons.		

It is a matter of some interest to ascertain the average age of the Norwegian timber used in the mines; and the rings, marking the annual growth, have been counted in what appeared to be ten average trees. They exhibited rings, 140, 114, 120, 100, 60, 121, 98, 120, 140, 162, averaging 117.5 rings. Six other trees averaged 124 rings. The general average may be taken at 120 years' growth. Now, the consumption of 1836 was 36,207 loads of timber, which, at four trees to a load, is equal to 144,828 trees. If these trees grew fifteen feet apart, they would cover 750 acres of ground; and if they were 120 years old, it would require the produce of 140 square miles of Norwegian forest to supply the mines of Cornwall. It must be remembered, however, that the consumption of 1836 was unusually large.

Table XXI. shews the number of loads, price, and value of debenture timber from 1818 to the present time.

XXI.—Debenture Timber.

Years.	Loads.	Price. Shillings.	Value. Carriage Included	Years.	Loads.	Price. Shillings.	Value. Carriage Included.
1818	5,726	107	£30,634	1838	16,170	61	£49,318
1819	9,340	78	36,036	1839	17,391	57	49,364
1820	10,790	74	39,590	1830	14,506	57	41,339
1821	9,723	66	32,083	1831	16,266	59	48,291
1822	8,419	63	28,098	1832	17,341	47	40,751
1823	13,072	70	45,752	1833	18,982	47	42,963
1824	15,863	70	55,498	1834	19,596	58	50,947
1825	21,732	70	76,063	1835	24,832	59	64,563
1826	19,306	66	40,606	1836	36,207	59	94,138
1827	11,687	61	25,643	1837	14,056	59	36,545

50 cubic feet = a load—on the average contained in four trees. Thus the consumption of 1836 was 36,900 loads, $\times 4 = 144,800$ trees.

The annual consumption of gunpowder is about 300 tons (2000 lbs. in each). The price in 1836 was 44*l.* per ton; and the value consumed per annum about 13,200*l.*

On the subject of vital statistics I have little to add to a paper which was laid before the Society by Colonel Sykes; but I have been furnished by Mr. Blee, of Redruth, with the facts which will be found in Table XXII., tending to shew the proportion of deaths from mine accidents and from diseases of the chest (to which miners are especially liable),

compared with deaths from other causes, in three of the largest mining parishes of the county.

XXII.—Male Deaths, between the Ages of Ten and Sixty, in the three great Mining Parishes.

AGE.	Gwennap, 18 Months, to Jan. 1837.			Redruth. 7 Years.			Illogan. 5 Years, to July, 1835.			Total.		
	Population in 1831.			Gwennap, 8,539; Redruth, 8,191; Illogan, 6,072—Total, 22,802.								
	Mine Accidents.	Diseases of Chest.	Other Causes.	Mine Accidents.	Diseases of Chest.	Other Causes.	Mine Accidents.	Diseases of Chest.	Other Causes.	Mine Accidents.	Diseases of Chest.	Other Causes.
From 10 to 20 . .	3	5	12	7	2	13	5	8	14	15	16	39
.. 20 .. 30 . .	3	10	11	3	13	11	4	14	15	12	47	37
.. 30 .. 40 . .	3	4	8	2	16	14	7	11	7	11	31	29
.. 40 .. 50 . .	6	18	6	3	39	11	3	23	6	12	80	34
.. 50 .. 60 . .	1	17	6	1	30	13	..	21	10	2	68	29
Total . .	17	54	43	16	101	63	19	87	53	52	242	158
	114			179			159			452		

I have taken the comparison only between the ages of 10 and 60, because few persons are found working in the mines out of these limits. It is dreadful to see how large has been the sacrifice of life from causes which are susceptible of alleviation, if not of remedy; the mine accidents proceeding chiefly from the blasting of rocks by gunpowder, and the diseases of the chest arising almost entirely from the effort of ascending from the greatest depths with exhausted strength; (the Consolidated Mines are above 300 fathoms deep from the surface). Both these evils, I hope, are in the course of being removed; the first by the use of a wedge, the invention of Mr. W. R. Fox, which will supersede the dangerous necessity of tamping with broken stone; and the second, by the application of machinery to raise the men from their work. The deaths from these two causes are, to the deaths from all other causes, between the ages of 10 and 60, as 294 to 158.

With respect to education, I will only observe, that the miners are fond of instruction, and are educated in their different grades far beyond the average of most other counties, but they possess no especial opportunities. I know of only one school on a mine particularly for the benefit of those there employed; it was established by the late Mr. Borlase, who was a member of this Society. About 100 scholars attend it, and the advantage to the mine and neighbourhood is said to be immense. It is at Wheal Vor, near Helston.

Table XXIII. exhibits a rough estimate of the total mineral wealth of the kingdom, and shews the proportion of it occupied by copper. I give it on the authority of Mr. English, editor of the *Mining Journal*.

XXIII.—Estimate of the Mineral Produce of Great Britain, on an Average of Years and Prices.

Quantity.		Value.	Quantity.		Value.
		£.			£.
Silver	10,000 lbs. Troy	30,000	Coal	25,000,000 tons	10,000,000
Copper	12,000 tons	1,200,000	Balt, Alum, and other minor		1,000,000
Tin	5,500 tons	530,000	Produce more than		
Lead	46,000 tons	950,000			
Iron	900,000 tons	7,000,000	Total Value probably exceeds		£20,000,000

Tables XXIV. and XXV. shew the amount of British copper exported; the foreign copper ore smelted under bond, and the rate per cent. of such ore.

XXIV.—British Copper Exported—Wrought and Unwrought.

Years.	Tons.	Years.	Tons.	Years.	Tons.	Years.	Tons.
1796	4,572	1802	6,348	1808	3,023	1814	3,035
1797	3,852	1803	4,454	1809	3,450	1815	5,093
1798	3,930	1804	2,935	1810	2,902	1816	5,307
1799	4,858	1805	3,007	1811	2,413	1817	6,647
1800	4,847	1806	2,343	1812	2,384	1818	6,077
1801	4,925	1807	3,374	1813	..	1819	4,894

XXV.—British Copper Ore Exported, distinguishing Unwrought and Wrought; Foreign Ore Imported; Copper Smelted therefrom and Exported; the Rate per cent. of Metal Exported to the Ore Imported.

Years.	British Copper Exported.			Foreign Copper Imported.	Exported, Smelted from Foreign Ore.	Produce per cent. of Ore (computed from Metal Exported.)
	Unwrought.	Wrought.	Total.			
	Tons.	Tons.	Tons.	Tons.	Tons.	
1820	3057.7	40.10	6097.9	..	..	..
1821	1737	4544	6271.5	..	..	..
1822	1291	4499	5683.5	..	..	..
1823	1204	4121.6	5325.8	..	..	..
1824	960	4944	5904.8	..	..	..
1825	..5	3930.6	3931	..	..	..
1826	130.2	4669.4	4799.7	64.8	..	..
1827	1329	3841	7171	39.9	..	..
1828	1079.5	5126.5	6206	334.6	7	..
1829	2648.9	5327	7976	1219.9	33.6	Five Years. 13.2
1830	9996	6171.5	9157.7	1436.6	164.1	
1831	3360	5170.6	8530.6	2545.9	254.4	
1832	3874.8	5855.7	9730.6	3955.7	694.7	
1833	2294.3	5417.9	7711.6	5981.6	1624.6	
1834	4098.9	4787.5	8886.5	6367	1185.7	Five Years. 19.5
1835	3163.6	5940.6	9111.2	13946	2773.8	
1836	1970.4	6105.8	8076.2	18419	1939	
1837	1673.6	5455.6	7129.3	19465.8	5155.2	

N.B.—No return is made of the metal obtained from foreign ores, and the produce per cent. can be estimated only by reference to the copper exported. For this purpose it is necessary to take groups of years, and I have taken two. The first, comprehending five years, from 1828 to 1832 inclusive, giving a produce of 13.2; and the second, of five years, from 1833 to 1837 inclusive, giving a produce of 19.5. The produce of the whole period is 18.7. But as the ore exported in each year is, in some measure, smelted from the importation of the year before, I have compared the exports of ten years, ending with the close of the year 1837, with the imports of ten years, ending with the close of 1836, and this comparison gives a produce of 25.5. This, probably, somewhat exceeds the real rate of produce, but not to any great extent, as will be seen by the following Table:—

Average Produce by Assay of all the Foreign Ores Imported at Swansea and Liverpool, from 1827 to May 1833.

SWANSEA.		LIVERPOOL.	
From South America	236	From South America	234
United States	237		
Norway	84		

In concluding this Paper, I have only to offer my best thanks to the Mine-Agents and others who have very readily given me their assistance in collecting information. I particularise none, because they are so numerous; but I must not omit to acknowledge especially my obligations to persons connected with the Consolidated Mines and Fowey Consols, for communications almost of a confidential character, which have formed the basis of my calculations. The sketch I here offer is slight, and some of the Tables are avowedly imperfect; but they will shortly be replaced by the results of an enquiry taken up at the suggestion of the British Association, and now in the hands of a person having far better opportunities than I possess of obtaining information. His Report will comprehend all the mines, of whatever description: I have confined myself to those of Copper.

JOINT-STOCK COMPANIES IN FRANCE.

THE French Code of Commerce recognizes three kinds of Commercial Societies for purposes of a permanent nature;—viz., 1st, Societies “en nom Collectif,” or Common Partnerships; 2d, Societies “en Commandite,” or Firms with Sleeping Partners; and 3d, Anonymous Societies, or Joint-Stock Companies.

The first consists of a certain number of persons associated in a firm, in which their several names are included. Each partner is responsible for the whole, and there is no limit to his liability.

Societies “en commandite” consist of several individuals, one or more of whom are alone responsible for the acts of the firm, and are liable to the whole extent of their property. Others, who embark a fixed amount of capital in the enterprise, and are called “commanditaires,” or sleeping partners, take no share in the business of the society: their names do not appear in the firm, and they are responsible only to the extent of their registered investment. The law allows this sum to be divided into transferable shares.

The third class, or Anonymous Societies, resemble Joint-Stock Companies in this country. The capital is divided into shares, and each holder is liable only to the amount of those which he possesses. The business is carried on by a few individuals elected by the shareholders, who are not personally responsible to the public.

In a recent Report of a Committee of the French Chambers the following statement is given of the number of Companies of the two latter classes established in France, and registered in the Tribunal of Commerce at Paris, from the year 1826 to the close of 1837:—

	Number.	Capital. Fr.	£.
Societies “en Commandite” . . .	1106	1,117,098,740	= 44,683,948
Joint-Stock Companies . . .	157	393,396,125	= 15,735,844

The average nominal capital of the first class is 40,000*l.*, and that of the latter 100,000*l.*

With respect, however, to the above figures, it must be borne in mind that a considerable number of the Companies never commenced.

operations from want of funds; that another large portion realised only a very small part of their calls; and that a deduction must be made for the double entry of some Companies, which were first created "en commandite," and afterwards formed into Joint-Stock Companies.

With the view of discovering the amount of capital actually invested in Commercial Companies, the same Committee examined a list of the several French Companies, the shares of which are offered for sale on the Exchange at Paris, and the result exhibited a presumed capital of about 670,000,000 fr., or 26,800,000*l.* From this sum, however, must be deducted 175,000,000 fr., the amount invested in banks, which is not withdrawn from the circulation, and 36,000,000 fr., the capital of assurance offices, the shares of which are principally represented by Government stock, leaving a remainder of 469,000,000 fr., or 18,760,000*l.*; but of this sum there can be no doubt that, contrary to the statute, a considerable portion has not been, and never will be, paid up.

During the present year the number of Societies, "en Commandite," has increased in a remarkable degree. In January and February there were registered 67 Societies, with a capital of 118,022,000 fr., or 4,720,880*l.*, divided into 219,212 shares. In March alone the capital of the Societies registered amounted to more than double that sum, viz., 274,572,000 fr., or 10,982,880*l.*, divided into 399,635 shares.

It will be seen from the following classification of the Companies formed since 1826, that enterprises connected with periodical and general literature form a large proportion of the total number. Of the 1106 Companies, 401 relate to Journals, Periodicals, and Books; 95 to Manufactures of various kinds; 93 to Coaches and modes of Conveyance; 60 to Forges, the manufacture of Metals, and the Coal-trade; 52 to internal and foreign Navigation; 40 were Banks; 27 Assurance Companies; 25 Companies for agricultural purposes, for draining Marshes, &c.; 24 Theatres; and 289 were of a miscellaneous nature.

The principal Companies formed this year are the—

	Fr.
Omnium, a Joint-Stock Bank, with a Capital of	25 Millions.
French Bank	30 "
Bank of Industrial Credit	5 "
Financial and Commercial Bank	150 "
Maritime, Conveyance, and Agency	10 "
Public Carriages, Paris	6 "
Colonisation of Algiers	6 "
La Prévoyante: an Assurance Society for Funerals	6 "
L'Abeille: a Fire Insurance Society	10 "
"Mobilisation du sol de la France"	10 "
"Banque de Mobilisation et de garantie de créances hypothécaires	20 "
Total	278 Millions.

The shares in these Companies are divided into very small sums, some as low as 10 and 5 francs. One Company for trading in wine has divided its capital of a million of francs into shares of various amounts, viz., 500, 250, 100, 50, and 25 francs, which are thus adapted to the means of every class of society.

An Account of an Enquiry into the State of 275 Poor Families in the City of Bristol.—From the First Report of the Statistical Society of Bristol.

THE Statistical Society of Bristol is engaged in an enquiry into the condition of the working classes in that city, and has already published one Report, containing an Abstract of the Returns obtained from the parish of Temple.

This parish, at the census of 1831, contained a population of 7,068 persons, occupying some of the poorest and most wretched dwellings in the city. The high road to Bath and London intersects it, so that it becomes a favourite resort of travelling lodgers. To this cause also may be ascribed the high proportion of families per house, as exhibited in the returns. It contains several manufactories of different kinds, but as neither in this parish, nor in the city generally, is there one leading manufacture, like the cotton trade of Manchester or the woollen trade of Leeds, the population is extremely miscellaneous.

Little reluctance on the whole was shewn to satisfy the enquiries of the agent. Out of 280 families, he met with only five absolute refusals, but some excitement was caused by the enquiry in different parts; and upon particular points, such as the condition of the sleeping-rooms, savings-bank deposits, &c., it was not always practicable to obtain information, even from an otherwise willing witness. The enquiry was at first carried on without including the queries relative to *country, religious professions, and economical habits*. The deficiency as to these particulars extends to about 50, out of the 275, families. No pains, however, were spared to render the investigation as complete and precise as possible—the agent returning more than once to the same house, if not able on his first visit to procure all the requisite information; and the Council expresses its belief that the results are as nearly accurate as can be expected in an investigation of this kind, and exhibit a correct view of the general condition of the labouring classes in the district.

The number of houses examined was 166; the condition of which may be inferred from the following particulars:—In 108 cases there were drains or sewers, and in 58 there either were no drains, or they were stopped; in 54 out of the 166 houses privies were wanting, or they were in a very bad condition; and in 83, or exactly half the number, there was either no water, or the supply was very bad and insufficient. In 126 instances, the apartments occupied by the families were airy, and in 149 they were close and confined.

The total number of families was 275, or 1·66 to each house. They consisted of 1049 individuals, giving an average of 3·82 to each family, and 6·32 to each house. Of the 275 heads of families, 101 were labourers, 18 charwomen, 16 shoemakers, 9 smiths, 9 carpenters, &c., 12 laundresses and sempstresses, and the remaining 110 were following various trades and occupations: 22 out of the whole number were in the receipt of parochial relief. By far the greater proportion were English: of 227 families, 215 were English, 7 Irish, 4 Welsh, and one was Dutch.

Of the heads of families, 197 were married couples; 22 were single men or widowers; and 57 were single women or widows: 205 families

had children; 70 had none. The number of children was 576, or an average of 2.81 to each family. Of these, 286 were boys, and 290 were girls: 210 of the former, and 212 of the latter, were below 14 years of age.

The following were the number of persons in each family:—

Persons	1	2	3	4	5	6	7	8	More than 8	Total.
Families	31	54	46	50	40	28	12	8	6	275

The number of families occupying one room only was 123; 105 occupied two rooms; and 47, three or more rooms.

In 175 instances the families rented their house or apartments from the owner, and in 100 instances from tenants.

The average rent paid by 84 families for 1 room unfurnished was						£	s.	d.	
,, ,, 69 ,, 2 rooms ,,						0	1	3½	per week.
,, ,, 18 ,, 3 ,, ,,						0	2	0½	,,
,, ,, 23 ,, 1 room furnished was						0	2	6½	,,
,, ,, 2 ,, 2 ,, ,,						0	2	9	,,
,, ,, 61 ,, houses						8	14	4	per ann.
,, ,, 18 not ascertained.									

275

The highest annual rent of the 61 houses was 20*l.*, and the lowest was 3*l.* 10*s.*

The average rent of 12 houses not exceeding 5 <i>l.</i> was				£	s.	d.
,, ,, 23 ,, between 5 <i>l.</i> and 10 <i>l.</i> ,,				7	12	8
Average of 35 . .				6	9	4
,, ,, 26 ,, of 10 <i>l.</i> and upwards was				11	15	0
Average of 61 . .				£ 8	14	4

With respect to the physical condition of the families, 182 were clean and healthy, including the middling clean; 16 were clean, but not healthy; 62 were dirty, but healthy; and 11 both dirty and unhealthy. Of the children, 545 were healthy, and 31 unhealthy: 96 families were reported to be in distress, and in great want of food, bedding, or furniture.

One of the great obstacles to the maintenance of neatness and comfort in the rooms of the labouring classes is a want of sufficient cupboards or shelves. Among the 275 families, 98 were not deficient in this respect; 140 had some, but insufficient accommodation; and 37 had none whatever; 134 men asserted that they had sufficient skill in the use of carpenters' tools, to mend their own furniture; 79 acknowledged that they had not. A strong test of the neatness of this class of persons is the number and nature of the prints which appear on their walls. No description is given in the present account of the pictures observed; but it is stated that 181 families possessed some, while 92 had not any. Of 207 heads of families, to whom the question was put, 35 acknowledged that they were either depositors in savings' banks, or members of benefit societies or trade clubs.

The following facts illustrate the intellectual condition of the population examined :—Among 473 heads of families, including females, 234 stated that they could read and write with a greater or less degree of proficiency; 99 that they could only read; 137, or a proportion of 29 per cent., did not pretend to be able to do either: 213 families possessed books or tracts, or parts of some, and of this number 92 had either a Bible or Prayer Book, or both; 60 had not a book of any kind, nor a tract. Of the 576 children, 101 were stated by their parents to be able to read and write; 173 to read only; while 146 above 7 years of age, and 156 under that age, could not do either. The larger proportion of them could repeat the Lord's prayer, viz., 405 out of 576; 42 above 7 years of age could not repeat it; to whom must be added 129 who were under that age, and therefore too young, or who were not accounted for.

The total number of children at school was 182. The following particulars will shew the character of the deficiency in this respect :—

	Below 8 years of age.	From 8 to 14 years.	Above 14.	Total.
Children attending day-schools	92	39	4	135
,, Sunday-schools	9	31	7	47
Total . .	101	70	11	182
Children not at school	251		143	394

Of the 251 children under 14 years of age, 103 were less than 3 years old, and therefore too young for school. The proportion of those between 3 and 14 who were at school is 54 per cent.

The payments made by the parents for the instruction of their children were as follows :—

Rates of payment per week	1d.	2d.	3d.	4d.	6d.	7d.	8d.	12d.
Numbers paying	28	54	13	10	1	2	2	1

Besides the above, 64 were taught gratis, chiefly in the Sunday-schools; and 7 were paid for by friends.

126 children had been brought up to trade, or to some useful occupation; 28 above the age of 14, and 422 below that age, had not been so brought up. Of the 163 girls who were of an age to sew and wash, 68 could sew, and 84 could both sew and wash.

The above returns are not only valuable in themselves, as indicating the social and intellectual condition of a numerous body of poor families in Bristol, but as they afford the means of comparing the state of the poor in that city with their state in other towns in which similar enquiries have been prosecuted. Accounts have already appeared of such investigations in Manchester, Miles Platting, Marylebone, and Herefordshire; and enquiries of the same nature have been commenced in Liverpool by the Statistical Society of that town.

AGRICULTURAL RETURNS.

Agricultural Returns, County of Bedford. Presented to the Statistical Society of London, by the Right Honourable the PRESIDENT of the BOARD of TRADE.

*Statistical Department, Board of Trade,
Whitehall, May 3rd, 1838.*

SIR,

At the desire of the President of the Board of Trade, Mr. Poulett Thomson, I have the honour to send herewith an Abstract of some Statistical Returns, exhibiting the agricultural capability and production of twenty-seven parishes in Bedfordshire, in the year 1835. This Abstract you will be so good as to present, in Mr. Thomson's name, to the Council of the Statistical Society of London.

The President of this Board, participating in the desire generally felt of possessing accurate information on the subject embraced by these Returns, so that on a question of such high importance as that of the productive powers of the soil, and of the degree and manner in which these are called forth in this country, we should be no longer left to conjecture, or at best to the uncertainty of vague computations, gave directions, in May 1836, for the preparation of some simple but comprehensive queries, the answers to which might exhibit the leading facts upon the subject.

There is not any class of public functionaries in this country whose services can be claimed for this purpose by the Government, and after much consideration, it was determined to apply for the assistance of the resident clergy, making it a personal request that, as a matter of courtesy, each should endeavour to obtain the requisite answers to the queries. A copy of the queries, and of the letter by which they were in each case accompanied, are sent herewith, marked (A.) and (B.).

To have sent these papers simultaneously to the resident clergyman of every parish in England and Wales would have been a very laborious work, and, until it should be shown that a reasonable chance for success would follow upon the application, it was not thought proper to employ much time and labour in the experiment. To test, therefore, the probability of success that might result from the more extended enquiry, one county, Bedfordshire, was chosen; and application was made to the resident clergyman of each of the 126 parishes into which that county is divided. Had the result of these applications proved sufficiently encouraging the enquiries would have been extended throughout England and Wales, but as out of the above-mentioned number of 126 clergymen, returns were made by only 27, or about one in five, the attempt was necessarily abandoned.

I have the honour to be, Sir,

Your very obedient servant,

G. R. PORTER.

*Woronow Greig, Esq., Honorary Secretary
to the Statistical Society of London.*

(A.)

*Statistical Department, Board of Trade,
Whitehall, May 1836.*

REVEREND SIR,

I AM directed by the President of this Board to submit to you the accompanying set of Questions.

The President is aware that in requesting you to be good enough to return answers as far as you are able to these enquiries, he can only appeal to your courtesy and desire of being useful; but he trusts that he may make the application without being charged with presumption when he states, that he is actuated solely by the desire of procuring for the use of this Department, and for objects purely Statistical, as much information as possible, with a view to its being afterwards made available to the public at large.

Some of the Questions may possibly not apply to the particular parish in which you reside, and with regard to others of them which do so apply, it may not, in every case, be in your power to return answers; but as the usefulness of the information will, of course, depend in a great measure upon its completeness, the President will feel himself much obliged by your obtaining and giving answers to as many as possible.

I have the honour to be, Reverend Sir,

Your very obedient Servant,

G. R. PORTER,

Chief of the Statistical Department.

*To the Resident Clergyman
of the Parish of ———*

(B.)

Name of Parish.

1. What is the number of acres of land in the Parish?
2. What is the number of farms in the Parish?
3. What is the mode of letting? If by leases, their nature, and for what term of years?
4. What is the size of the several farms?
5. What is the nature of the soil?
6. What is the nature of the sub-soil?
7. What is the depth of the soil?
8. What is the state of drainage?
9. What is the number of acres under the plough?
10. What is the usual course of crops?
11. What is the number of acres of pasture land?
12. What is the number of acres of meadow land?
13. What is the number of acres of wood and coppice?
14. Of what kind of trees do such woods principally consist?
15. Have any extensive plantations been recently made?
16. Of what extent, and of what kinds of trees?
17. What is the number of acres of common, marsh, waste, or other land, not previously specified? Distinguish each kind.
18. What is the average annual quantity of hay, distinguishing whether from natural, or artificial grasses?
19. What was the number of acres planted with wheat in 1835, and the quantity produced?

20. What was the number of acres planted with barley in 1835, and the quantity produced?

21. What was the number of acres planted with oats in 1835, and the quantity produced?

22. What was the number of acres planted with rye in 1835, and the quantity produced?

23. What was the number of acres planted with beans in 1835, and the quantity produced?

24. What was the number of acres planted with peas in 1835, and the quantity produced?

25. What was the number of acres planted with buckwheat in 1835, and the quantity produced?

26. The same of hemp.

27. The same of flax.

28. The same of teazle.

29. The same of carraway-seed.

30. The same of canary-seed.

31. The same of coriander-seed.

32. The same of any other kind of grain not previously specified.

33. What is the quantity of seed of each different kind of grain per acre?

34. What is the average annual quantity produced of each kind of grain respectively?

35. What was the number of acres planted with potatoes in 1835, and the weight produced?

36. What was the number of acres under fallow in 1835, specifying the number planted with turnips, and whether they were fed off, or drawn off; also the number planted with tares as a green crop?

37. What was the number of acres planted with tares for seed in 1835, and the quantity of seed produced.

38. What was the number of acres of clover, and other artificial grasses cut for seed in 1835, and the quantity produced?

39. What is the number of horses employed for agricultural purposes?

40. What is the number of horses employed for other purposes, viz. cart horses, breeding horses, and pleasure horses?

41. What is the number of working oxen?

42. What is the number of grazing cattle, exclusive of milch cows?

43. What is the number of milch cows?

44. What is the number of calves bred in the year, specifying the number for meat, and the number for rearing?

45. What is the number of sheep of long-woolled breed, and the average weight per fleece of wool?

46. What is the number of short-woolled sheep, and the average weight per fleece?

47. What is the number of lambs of all descriptions, bred in the year, specifying the number for meat, and the number for rearing, together with the average weight of wool per fleece, if shearing is practised?

48. What is the number of sheep annually employed in folding the land in summer?

49. What is the number of sheep sheared in a year?

50. What is the quantity and description of cheese made in the year?

51. What is the quantity and description of butter made in the year?

52. What is the usual rate paid for various kinds of labour, in summer and in winter respectively?

Name of Parish.	Extent. No. of Acres.	No. of Farms.	Mode of Letting.	Size of Farms.	Nature of the Soil.	Nature of the Sub-soil.	Depth of Soil.	State of Drainage.
Arlsey	3200	10	Only 2 on running leases of 4 years.	6 at 200, 1 at 150, and 3 at 60.	Chiefly heavy ..	Gravel and clay.	1 to 2	Almost all drained. Drains out of repair.
Astwick	640	3	Both the farms are freehold.	320 and 220	Heavy	Clay	4	Nearly all drained.
Bedford, St. John's	Under 80	5 fields	Yearly	50 to 100	Gravel	Gravel	6 to 8	Good
Bedford, St. Mary's	400	4, and small allotments	Yearly, not by lease.	5 from 200 to 250 2 " 150 " 200 3 " 100 " 150 1 " 80 " 100 7 under 50.	Alluvial	Variable — silt, and in parts clay.	9 to 12	Generally good.
Blunham with Muggershanger.	2500	20	Yearly, not by lease.	5 from 200 to 250 2 " 150 " 200 3 " 100 " 150 1 " 80 " 100 7 under 50.	Alluvial	Variable — silt, and in parts clay.	9 to 12	Generally good.
Caddington, part in Herts.	4515	13	7 tenants yearly, or on lease from 2 to 9 years.	1 of 500	Clay, gravel, and chalk.	Clay, with much silt, gravel, and chalk.	4 to 6	None
Clifton	Abt. 1450	Principal	2 in proprietor's hands.	150 to 200, the rest in small occupations.	Gravel	Gravel and clay	About 9	Pretty good....
Clophill	3210	10	At will	50 to 250	Sand, clay, and peat.	Sandstone, rock, and clay.	.....	.....
Cople	2050	11	On lease for 7 years.	200 to 250	Gravel, clay, and wood-land.	Gravel and clay.	6 to 24	Tile on gravel, wood on clay.
Dunstable	410	4	Yearly	1 of 127, 3 of 50, the rest in small allotments.	Light, chalky ..	Chalk	5 to 6	None required..
Dunton with Millow	2400	11, and 12 allotments	Yearly	40 to 440; allotments from 1 to 10.	Clay	Chiefly blue clay the rest loamy ditto.	2 to 3	Chiefly with bushes.
Farndish	Abt. 648	5	Yearly	1 of 107	Clay, red sandstone, and lime stone.	Rock and clay..	4 to 6	About 2-3ds of the parish.
Filton	875	6	Generally yearly	2 from 100 to 150 1 " 50 " 100 100 to 150	Sandy loam	Sand, or sandstone.	6 to 12	Generally good.
Gravenhurst, Lower	1200	1	The only farm is freehold.	.....	1000 acres clay, 200 acres alluvial	Blue gait	By nature no staple	Formerly hollow drained with bushes, but without effect.
Henlow	2120	9, and small lettings.	At will	1 of 485, 2 of 220, 2 " 200, 2 " 150, 1 " 81; small allotments 110.	4-5ths the thin soil, clay bottom; 1-6th gravel.	Stony undergravel, and red clay, gait, and marl.	2 to 6	All the heavy land under-drained.
Keysoe	2500	28	Chiefly yearly, 2 belonging to colleges are for 21 years, and underlet by the leaseholder.	of 205, 5 ab. 50 ab. 200, 2 " 20, 2 " 250, 2 " 30, 2 " 150, 7 " 10, 2 " 100, 3 " 5, 66 acres in allotments.	Clay	Stiff yellow clay, with chalk, stones; in some parts blue clay	About 6	Very good.....
Northill	Abt. 4000	24	Yearly	From 50 to 400	Gravel, clay, loam, and sand.	Gravel and clay.	Gravel, 24 to 40; clay, 18 to 24; loam, 10 to 20.	Mostly, except on small farms.
Poddington	Abt. 2750	12	Yearly — if by lease, (rarely) for 7 years.	Average 200	2-3ds loamy clay, 1-3d wood-land	Chiefly clay	5 to 6	Tolerable; lately much improved.
Potton	Abt. 2000	10	Yearly—a few by leases for 7 yrs.	5 averaging 250 " 120	1-half clay, 1-hf. sand.	Clay and sandstone.	9 to 24	Very good
Sandy	2023	14	.....	1 from 450 to 500 1 " 350 " 400 2 " 200 " 300 3 " 100 " 200 5 under 100.	Gravel, clay, sand, & marl.	.....	.....	.....
Stoughton, Little.	Abt. 1200	7	Yearly	40 to 220	Cold weak clay in one part, cold strong clay in another.	Blue gait	About 6	About 1-3d with wood and lime.
Toddington	5427	42	Generally yearly	Averaging 120	Rich loam, and gravel.	Clay and gravel.	.....	Agrost part hollow drained.
Turvey	Abt. 4400	20	Generally yearly	50 to 500	Gravel, blue clay, and lime-stone.	Rock, gravel, and poor clay.	5 to 16	Generally
Widens	2170	23	No leases	2 to 200	Cold clay	White gait	About 6	About 2-4ths, & progressing.
Wilhamstead	2267	12, and small occupations.	Yearly .....	.....	Gravel and clay.	Generally clay .	5 to 6	Greatly improved but imperfect.
Wynington	1686	17	Yearly	1 of 450, 1 of 220, 1 from 150 to 200, 4 " 100 " 150, 2 " 50 " 100, 7 under 50.	Clay and wood-land.	Clay mixed with chalk-stone.	4 to 5	About 2-4ths.
Yelden	Abt. 1000	6	Yearly	1 of 250	Stiff clay	Clay .....	.....	A small part ...

No. of Acres under the Plough.	General Course of Crops.	No. of Acres.				Plantations recently made.		No. of Acres of Marsh, Waste, or other Land, not specified.	Average Annual Quantity of Hay.	
		Pasture Land.	Meadow Land.	Wood or Coppice.		Extent.	Kinds of Trees.		From Artificial Grasses.	From Common Grasses.
				Extent.	Kinds of Trees.					
1600	The 4-course; a few 5.	Acres. 500	Acres. Included in pasture.	20	Ash, elm, & fir.	None.....	.....	50 common.		
All	further information refused by the Farmers.									
275	The 4-course....	215	None....	None....	.....	None.....	.....	None.....	1½ per acre	1½ per acre
1725	Ditto.....	220	484	20 wood, 10 plantation, and 100 fences	Oak, ash, elm, and fir.	None.....	.....	140 garden....	220 tons, 150 .. 50 ..	Meadow, highland clover.
2800	2 crops and a fallow.	Abt. 500	2 to 300	140	Oak, ash, and beech.	One of 30 acres.	Fir, oak, & beech.	None.....	200 loads.	150 loads.
.....	.....	Abt. 300	.....	9 or 10	Coppice-wood, hazle, ash, &c.	A few....	Chiefly ash, and larch.	None.		
1400	The 4-course....	700	.....	200	Woods — oak : plantations—fir	None.....	.....	None.		
1250	2 crops and a fallow.	500	40	97	Elm, oak, ash, and poplar.	None.....	.....	None.....	On 40 acres.	On 190 acres.
170	The 4-course....	214	With pasture.	None....	.....	None.....	.....	None.....	1 to 1½ ton per acre.	
2000	2 and sometimes 3 crops and a fallow.	270	None....	5	Ash and elm....	None.....	.....	None.....	450 tons..	50 tons.
400	The 4-course....	None....	None....	1½	Ash and fir....	None.....	.....	None.....	About 60 tons.	
500	Generally 4-course.	200	50	1	Whitethorn & alders.	None.....	.....	50 bog & marsh.	200 tons.	
800	Formerly 2 crops and a fallow; at present a new system.	200	100	6	Ash and fir....	None.....	.....	.....	1 ton per acre.	
1000	The 4-course; a few 5.	190	940	16	Oak, elm, ash, and fir.	None.....	.....	.....	1 to 1½ ton per acre.	1 ton per acre.
2100	The 4-course....	600	400	224	Oak.....	None.....	.....	None.....	120 tons..	300 tons.
2700	Ditto.....	Abt. 1000	Abt. 100	100	Oak, ash, elm, larch, & maple.	None.....	.....	500 gardens; 12½ common.	Very little.	
1300	Ditto.....	Abt. 250	20	250	Woods—oak and ash; under-wood, ash, and black-thorn.	A few small.	Oak, ash, larch, &c.	Hedges & grass-lands, 110; gardens, 25.	Rather more than ½ ton per acre.	½ ton per acre.
2115	Ditto.....	Abt. 190	With pasture.	210	Oak and ash....	None.....	.....	Gardens, 255; waste, 40; race ground, 40.	100 tons..	100 tons.
1200	.....	501	With pasture.	220	Fir and forest-trees.	.....	.....	Gardens & home-stands, 498; heath and waste, 508.	Further information refused by the Farmers.	
800	Ditto.....	Abt. 270	None....	Abt. 10	Elm & oak....	20	Fir, elm, oak, &c.	Gravel-pits, 2..	40 tons....	80 tons.
2715	The 5 & 3-course.....	.....	.....	150	Oak, elm, & ash	None.	.....	.....
2300	The 4-course....	Abt. 2100	Abt. 100	Abt. 200	Oak, ash, hazle, & fir.	Nearly all	.....	None.....	500 tons..	500 tons.
1000	2 crops and a fallow; some alternately a white and a green crop.	2 to 300	None....	Abt. 20	Ash, elm, & oak	None.....	.....	None.....	20 to 30 tons.	120 tons.
2000	2 crops and a fallow.	Abt. 700	With pasture.	165	Oak, elm, & ash	None.....	.....	None.....	Very small.	
1014	The 4-course....	671	None....	15	.....	.....	.....	Gardens, 74....	60 tons..	90 tons.
800	Ditto.....	Abt. 600	Abt. 75	Abt. 10	Underwood.....	None.....	.....	Waste, common roads, &c., 175.		

Name of Parish.	PRODUCE in 1835.											
	Wheat.		Barley.		Oats.		Rye.		Beans.		Peas.	
	Acres.	Qty.	Acres.	Qty.	Acres.	Qty.	Acres.	Qty.	Acres.	Qty.	Acres.	Qty.
Arisey.	The	Bush.	rs decline	Bush.	wearing	Bush.	question	Bush.		Bush.		Bush.
Bedford, St. Mary's.	70	1,750	80	2,200	30	800	None	..	30	600	10	200
Blunham with Mugerhanger.	400	10,000	300	12,000	30	1,750	None.	..	50	1,500	30	750
Caddington, part in Herts.	730	16,000	460	18,400	230	9,160	5	Failed.	60	Not stated.	66	Not stated.
Clophill	Abt. 250	..	Abt. 350	..	Scar. any	..	None.	..	Abt. 175	..	..	..
Cople	337	8,425	300	10,800	40	1,440	None.	..	50	1,350	10	250
Dunstable	50	1,250	44	1,408	42	1,680	None.	..	None.	..	None.	..
Dunton with Millow	500	8,000	470	11,980	100	3,200	None.	..	50	1,200	40	960
Farnish	126	4,032	97	3,104	19	384	None.	..	39	1,092	21	336
Flitton	150	3,750	100	3,600	40	1,600	2	80	40	1,000	10	200
Henlow	380	9,500	300	11,400	60	2,640	None.	..	90	2,250	40	800
Keysoe	700	14,000	300	9,000	150	4,800	None.	..	400	8,000	27	400
Northill	550	11,000	350	11,200	200	8,000	None.	..	Not known.	..	None.	..
Poddington	416	7,990	100	2,560	250	7,600	None.	..	92	2,576	None.	..
Potton	460	11,500	400	12,800	120	4,800	60	1,500	90	2,700	110	2,750
Staughton, Little	296	4,520	150	4,800	95	4,000	None.	..	120	3,260	30	840
Turvey	Ab. 500	12,000	Ab. 200	6,400	Ab. 300	9,600	None.	..	Ab. 300	7,200	None.	..
Wilden	Abt. 600	12,000	Abt. 120	3,840	400	10,000	None.	..	100	2,000	None.	..
Wilhamstead	Abt. 500	..	Abt. 330	..	Very few.	..	None.	..	Abt. 300	..	Very few.	..
Wymington	287	4,740	149	3,408	177	5,664	None.	..	80	2,064	None.	..
Yelden	225	4,500	100	3,200	80	2,560	None.	..	160	3,200	None.	..

Name of Parish.	Potatoes in 1835.		Land under Fallow in 1835			Tares for Seed in 1835.		Clover and Artificial Grasses for Seed in 1835.		No. of Horses employed for	
	Acres planted.	Quantity produced.	Total No. of Acres.	Turnips, whether Fed or Drawn off.	Tares as a Green Crop.	Acres.	Qty.	Acres.	Quantity of Seed.	Agricultural purposes.	Other purposes.
Arley	Very few	..	Abt. 400	..	..	Farmers decline	..	..	..	60	12
Bedford, St. Mary's.	None.	..	70	42	25	3	45	Broad, 50 Dutch, 50	30	25	Very few.
Blunham with Mugerhanger.	10	150 bush.	..	250 f. o.	100	20	200	50 c. l.	20 sacks	80	46
Caddington, part in Herts.	5	..	820	256 f. o.	140	26	290	23 c. l.	23 bush.	104	Cannot be ascertained.
Clifton . . . . .	..	..	..	..	..	..	..	..	..	..	4 or 6 pleasure
Clophill	Very few.	..	Abt. 350	Chiefly fed off.	..	Very few.	..	Abt. 175	..	..	..
Cople	12	..	300	240 f. o.	..	..	..	Abt. 40	..	Abt. 50	..
Dunstable	None.	..	..	25 failed.	6	None.	..	None.	..	6	..
Dunton with Millow	5	30 tons.	500	50 f. o.	50	40	640	3-0	40	80	20
Farnish	14	240 bush.	82	30 f. o.	15	14	140	30	40	22	2
Flitton	16	1600 ..	95	65 f. o.	30	7	105	16 to 20	112 to 140	30	10
Henlow	20	3000 ..	404	20 f. o.	..	Very few.	..	70	R. 1 1/2 cwt. ac. W. 8	65	12
Keysoe	None for	Market.	500	30 f. o.	60	40	280	104	95	70	20
Northhill	Un	known.	550	Fed off.	..	None.	..	Un	known.	4 per 100 acres.	Un
Poddington	Very few.	..	340	24 f. o.	40	55	664	70	Failed.	88	30
Potton	60	300 tons.	320	160 f. o.	50	60	1600	60	7 1/2 tons.	Abt. 70	Abt. 10
Staughton, Little	None.	..	180	10 d. o.	40	15	360	70	210 bush.	Abt. 45	None.
Toddington	Abt. 16	Rented by the Poor.	..	..	..	..	..	..	..	..	..
Turvey	Only in of the	Gardens Poor.	500	100 f. o.	150	20	480	Can be ascertained.	..	Abt. 120	Abt. 55
Wilden	None.	..	600	None.	50	10	120	30	22 1/2 cwt.	63	12
Wilhamstead	5 to 6, in Plots.	650 to 780	500	250	250	Very few.	..	100	200	Abt. 100	..
Wymington	None.	..	188	None.	10	23	184	85	17 1/2 cwt.	58	None.
Yelden	None.	..	250	None.	Very few	..	..	91	..	..	..

Other Grain not specified.		Quantity of Seed used per Acre.							Average Annual Produce per Acre.						
Acres.	Qty.	Wheat	Barley	Oats	Rye	Beans	Peas	Other Grain.	Wheat	Barley	Oats	Rye	Beans	Peas	Other Grain.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
None.	..	3	4	5	..	5	5	..	25	40	48	..	30	30	..
None.	..	3	5	6	..	4	4 to 5	Tares, 3	25	40	35	..	30	25	..
13 of 30 lbs. of Cabbages, 200 of C Cloves.	..	3	4	5	..	4	4	Tares, 3; Turnips, 8 to 10 lbs.	25	40	40	..	20 to 25	20 to 25	..
None.	25	35	35	..	25	25	..
None.	..	3	5	5	..	..	..	..	25	32	40	..	..	..	..
None.	..	3	5	6	..	4	4	..	16	24	32	..	24	24	..
None.	3	3	..	22	32	22	..	28	16	..
1 road Popples	..	24	24	..	..	3	3	..	22	32	40 to 43	..	24	16	..
11. Carr
Clover.	..	3	4 1/2	..	..	3 to 4	4	Clover, 2 lbs.	25	36	40	..	27	24	Glover, 2 cwt.
200	500	3	4 to 5	6	..	4	3 to 4	..	20	30	32	..	20	15	..
None.	..	2 to 3	4 to 5	5 to 7	..	3	3	..	20	32	40	..	..	..	..
None.	..	3	4	5	..	4	..	..	21	24	28	..	24	..	..
Clover & Grams	..	3	4 1/2	5	3	3 1/2	3 1/2	..	25	32	40	25	30	25	..
100	..	3	4	6	..	4	4	..	30	32	40	..	28	28	..
None.	..	3	4	5	..	3	..	..	30	..	30	..	20	..	..
None.	..	2 1/2	4	5	..	3	..	..	20	32	25	..	26	..	..
None.	..	2 1/2	4	5	..	3 1/2	..	..	20	32	..	..	..	..	..
Grass.	..	3	4	5	..	4	..	..	20	32	32	..	20	..	..
30	20	32	32	..	20	..	..
None.	20	32	32	..	20	..	..

No. of Working Oxen.	No. of Grazing Cattle, (other than Milch Cows.)	No. of Milch Cows.	No. of Calves Bred in the Year.		No. of Sheep of long woolled Breed		No. of Sheep of short woolled Breed		No. of Lambs Bred in the year.		No. of Sheep Annually employed in folding the Land in Summer.	No. of Sheep Shorn in the Year.	Cheese made in the Year.		Butter made in the Year.	
			For Rearing.	For Meat.	No.	Average Weight per Piece	No.	Average Weight per Piece	For Rearing.	For Meat.			Qty.	Description.	Qty.	Description.
						Lbs.		Lbs.								
None.	None.	63	8	55	The Farmers decline	answering.	All	..	..	..	..	..	None.	..	3,000	..
None.	None.	Abt. 30	..	10	250	Abt. 5	None	..	150	50	300 to 300	300 to 350	None.	..	None.	..
None.	20	116	50	60	2,200	5 to 6	None	..	1,100	..	1,100	2,200	None.	..	8,000	Fresh.
12	25	44	8	23	1,726	5	1,028	4	1,270	200	2,500	2,300	None.	..	Little.	..
None.	..	..	..	..	..	..	..	..	..	..	..	..	None.	..	..	..
..	Variable.	Variable.	..	..	..	5 to 6	..	3	..	Most.	..	..	None.	..	..	..
None.	Abt. 30	30	10	10	1,400	5	200	3 to 4	900	..	All.	All.	None.	..	Little.	..
None.	None.	14	..	..	..	None	60	4	..	..	60	60	..	..	None.	..
None.	None.	20	..	20	1,600	5 1/2	None	..	700	100	1,500	1,600	None.	..	None for Sale	..
None.	None.	22	11	11	430	4 to 4 1/2	None	..	450	..	All.	All.	None.	..	..	..
None.	Abt. 30	40	20	..	300	4 to 10 or 12	..	..	300	..	200	300	None.	..	6,000	..
None.	None.	50	..	40	1,700	6	50	3 1/2	660	200	1,600	1,700	None.	..	1,500	..
None.	Abt. 60	Abt. 70	35	35	1,260	4 1/2	None	..	580	20	All.	All.	None for Sale	..	10,000	Fresh.
None.	Unknown	..	Few.	Few.	..	6 1/2	None	..	..	..	Not gra-	2,500	None.	..	None for Sale	..
None.	80	40	25	15	1,500	We. 8	None	..	680	30	1,280	1,500	Very little.	Not good, resembles Leicester.	Little.	Fresh.
None.	Abt. 30	Abt. 25	Abt. 25	..	About 1,500	Abt. 5 1/2	None	..	About 850	..	Abt. 1200	1,600	None.	..	None.	..
None.	None.	Abt. 50	Abt. 30	..	400	6	None	..	300	..	350	300	None for Sale	..	About 4,992	..
None.	..	..	..	..	..	..	..	..	..	..	..	..	None for Sale	..	..	..
None.	Abt. 300	Abt. 60	20	20	2,000	5 to 6	None	..	2,000	..	1,500	2,000	None.	..	Can not be ascertained	..
None.	30	30	20 also 20 other.	..	900	4	None	..	400	..	900	900	None.	..	30 to 40 cwt.	Fresh.
None.	None.	Abt. 44	About 30	..	About 500	5	None	..	500	..	800	800	None.	..	Small.	..
None.	Abt. 90	32	24	19	806	5	None	..	395	None	520 sheep & lambs	806	None for Sale.	..	Small.	..
None.	Abt. 140	Abt. 40	50	20	1,000	4	None	..	100	500	Abt. 800	1,000	None for Sale.	..	4,800	..

NAME of PARISH.	RATES of WAGES.
Arlesey	Common labourers, 8s. per week; 10s. per piece.
Asotwick . . . . .	. . . . .
Bedford, St. John's . . . . .	. . . . .
" St. Mary's	Winter, 9s.; summer, 10s.; taskwork, 12s.; in harvest month, 8s. extra.
Blunham with Muggerhanger	Day-labour, winter and summer, 9s.; thrashing and jobwork, 10s. to 12s. In harvest, with board, 80s.; without board, 80s., per month.
Caddington	8s. to 10s. In hay-harvest, 10s. to 12s.; by the piece, 2s. 6d. to 3s. per acre, for mowing. In wheat-harvest, if with board, no increase; if not boarded, double wages. By the piece, 9s. to 10s. per acre for wheat; 2s. for barley or oats.
Clifton	8s. to 9s. per week.
Clophill	Winter, 8s.; summer, 10s.; in harvest, 90s.
Cople	Men, 7s. to 9s.; boys, 1s. 6d. to 4s. 6d. per week.
Dunstable	Winter, 9s.; summer, 12s.
Dunton with Willow	9s. to 12s. per week; in hay-time, 15s.; harvest, 22s. to 30s.
Farndish	8s. to 9s. per week.
Flitton	8s. per week; hay-time, 12s.; harvest, 20s.
Gravenhurst, Lower . . . . .	. . . . .
Healow	Commonly, 9s.; lately, 8s. In hay-time and harvest, 11s. per week.
Keynos	Winter, 7s.; summer, 8s. to 9s. per week.
Northill	Summer and winter, 9s.; piecework, 11s. to 13s.; in harvest, 20s. to 25s.
Poddington	9s.; bad and old men, 6s. to 8s.; very good, often 10s.; little variation in winter and summer. Hay-time, extra; harvest-month, 80s. to 90s.
Potton	8s. to 9s. per week, but varies with the price of wheat.
Sandy . . . . .	. . . . .
Staughton, Little	Winter, 6s. 6d.; summer, 10s. per week.
Toddington	9s. to 12s. per week.
Tarvey	About 9s. throughout the year.
Wilden	7s. to 12s. per week.
Wilshamstead	9s. per week; mowing, 12s. to 15s.; draining, 2s. 6d. per 20 poles; thrashing, 2s. per load.
Wymington	8s. to 12s. Harvest, 18s. to 30s. per week.
Yelden	Winter, 8s.; summer, 9s. per week.

POLICE OF THE METROPOLIS.

[From Returns furnished by the Commissioners of Metropolitan Police.]

1. *Constitution of the Police Force.*—The total number of men at the close of 1837 was 3,421, consisting of 17 Superintendents, 70 Inspectors, 342 Serjeants, and 2,992 Constables. The number of married men was 2,440, and 981 were single men: 776 men resigned or were dismissed in 1837. The number of deaths which occurred in the force during the same year was 40.

The amount of gratuities given by the public to police constables for good conduct during the 8 years, from 1830 to 1837, has been 5,875*l.* averaging 734*l.* a year; and it is gratifying to state that the amount is annually increasing, it having last year reached 1,276*l.*

2. *Offences in 1837.*—The number of offences which came under the cognizance of the police in 1837 was 58,338, exhibiting a decrease of 12 per cent. on 1836, when they amounted to 66,248. The number of offences attempted in 1837, but prevented by the police, was 728; the number prevented by other persons was 134. The number of cases in which the offenders were apprehended at the time was 52,261, and of these 989 were not taken by the police. The number in which the offenders were apprehended subsequently was 2,537, of which 84 were not taken by the police.

The number of persons taken into custody was . . .	64,416
„ „ Discharged by the magistrates . . .	33,043
„ „ Summarily convicted or held to bail . . .	28,345
„ „ Committed for trial . . .	3,023
„ „ Convicted and sentenced . . .	2,266
„ „ Acquitted . . .	504
„ „ Bills not found, or not prosecuted . . .	258

Of the total number of offences 19,732 were cases of drunkenness, 3,103 of disorderly prostitutes, and 3,993 of vagrancy. The parish of St. James furnishes the largest proportionate number of cases in each of these classes. The number of common larcenies was 5,338, and of disorderly characters 6,891. These offences are most numerous in Clerkenwell, which district furnishes also the largest number of cases of horse-stealing, assaults with attempt to rescue, and wilful damage. Highway robberies, burglaries, house and shop-breaking, occur most frequently in the suburbs, as in Whitechapel, Southwark, Lambeth, Mile End, and Poplar. Larcenies in a dwelling-house were most numerous in Whitechapel in 1837, and in the Borough in 1836. Larcenies from the person occurred most frequently in Covent Garden during the former year, and in Shadwell during the latter, which may be accounted for by the number of prostitutes haunting these two districts.

With respect to larcenies generally, it is worthy of remark how small a proportion of the offenders in this class are convicted. The average proportion of convictions of every kind to the offences committed was 55 per cent. in 1837; but the convictions in cases of common larceny amounted only to 29 per cent.; in larcenies from the person it was 15 per cent., and in larcenies from a dwelling-house it was still further reduced to 13 per cent. This is chiefly to be attributed to the four following causes:—1st, In cases of robbery by prostitutes, to the parties declining to appear; 2nd, In cases of a trifling nature, to the parties not being willing to prosecute; 3rd, To the friends of the prisoners arranging with the person robbed; and 4thly, In cases of goods exposed, to the magistrates frequently discharging the offenders. The impunity enjoyed by this class of offenders strongly suggests the expediency of the appointment of a Public Prosecutor.

Common assaults were most frequent in Covent Garden in 1837, and in St. George's in the East in 1836; coining and uttering counterfeit coin in Clerkenwell and Covent Garden; embezzlement in Whitechapel and Clerkenwell; and pawning illegally in Mile End and Lambeth. The more serious crime of murder was most prevalent in Clerkenwell and Whitechapel; manslaughter in Islington and Clerkenwell; rape and attempts to ravish in Stepney and Bow; and arson in Marylebone and Westminster. The greatest number of deserters were apprehended in both years at Greenwich.

The above facts will suggest many considerations to persons conversant with the condition of the inhabitants in the various parts of the metropolis. One circumstance is too strongly marked to be passed over, viz., the unfavourable state of the Clerkenwell district as regards both the number and nature of the offences which are there prevalent; of these the greater proportion occur in the parish of St. Luke's.

3. *Burglaries.*—The number of burglaries within the district of the Metropolitan Police has greatly diminished during the last year. In 1836

it was 157, and in 1837 only 99. In a large proportion of these cases the perpetrators escaped, or, at least, were not apprehended within the year. In 1836 the parties escaped in 93 cases, or 59 per cent. of the whole number, and in 1837 they escaped in 68, or 68 per cent. The number of burglaries attempted, but prevented by the police, was 52 in 1836, and 54 in 1837. The number of cases in which the entry was effected by violence, such as by a crow-bar, centre-bit, &c., was 78 in 1836, and 64 in 1837. The entries by means of skeleton keys amounted to 79 in 1836, and 35 in 1837, exhibiting a great proportionate diminution of the latter class in 1837. In 1836 the greatest number of burglaries occurred in Lambeth; during the last year they were most numerous in Mile End.

4. *Robberies; Property Lost and Recovered.*—The following statements will shew the great difficulty which exists in detecting the perpetrators of robberies in the metropolis, notwithstanding the excellent organisation and vigilance of the police, and will enforce the necessity for an increase of caution on the part of the owners of property.

The number of robberies committed in 1837, where the perpetrators were not apprehended at the time, was 1,199. In 114 of these cases the parties were arrested between the time of the robbery being committed and the Weekly Returns being sent in to the Commissioners, and in 85 they were arrested after that period; but in 1000 cases, a proportion of no less than 83 per cent., the parties were not apprehended at all.

The total loss by depredation was 31,306*l.* in 1836, and 25,854*l.* in 1837. In the former year 13,842*l.*, and in the latter, 1,233*l.* was recovered from the depredators.

A detailed Account of Losses by Robbery, reported within the District of the Metropolitan Police, during the years 1836 and 1837.

Description.	1836			1837		
	First Loss.	Re-covered.	Total Loss.	First Loss.	Re-covered.	Total Loss.
Burglary	£. 1,739	£. 167	£. 1,621	£. 1,668	£. 86	£. 1,582
Breaking into Dwelling-house . . . . .	.. ..	.. ..	.. ..	238	5	233
Breaking into Building, Shop, &c. . . . .	.. ..	.. ..	.. ..	158	..	158
Highway Robbery	150	13	138	173	2	176
Horse Stealing	208	168	40	233	85	148
Cattle and Sheep Stealing	18	2	16	41	25	16
Forgery	56	..	56	34	..	34
Coining and Uttering	10	10	..	..	..	..
Fraud or Swindling	385	33	352	171	..	171
Embezzlement . . . . .	..	..	..	626	59	567
Larcenies	28,689	13,448	15,241	22,507	971	21,536
Total	31,306	13,842	17,464	25,854	1,233	24,621

The following Return exhibits the number of felonies committed in the Metropolitan District, specifying the various modes in which the

same were effected, and the amount of loss under each head; and further distinguishing, in column A, the cases for which the Police were responsible, from those in column B, which could not have been prevented by any vigilance on the part of the Police, but were attributable to a want of care and attention on the part of the sufferers themselves.

		A.		B.	
		Number of Felonies.	Amount of Loss.	Number of Felonies.	Amount of Loss.
			£.		£.
Larcenies.	Burglary	99	1,668	..	..
	Breaking into a Dwelling House, &c.	34	238	..	..
	Building, Shop, &c.	46	158	..	..
	Embezzlement . . . . .	..	..	179	626
	Forgery . . . . .	..	..	7	34
	Fraud . . . . .	..	..	108	171
	Horse-Stealing	25	233	..	..
	Robbery on Highway	43	178	..	..
	Sheep and Cattle-Stealing	10	41	..	..
	{ Goods, &c. exposed for Sale . . . . .	..	..	1,441	1,183
	{ Tools, Lead, Glass, &c. from unfinished Houses	410	415	..	..
	{ From Carts or Carriages . . . . .	..	..	218	922
	{ Linen, &c. exposed to Dry . . . . .	..	..	388	330
	{ Poultry, &c. exposed in an Outhouse	381	316	..	..
	{ By false Keys only . . . . .	..	..	293	3,016
	{ By Lodgers . . . . .	..	..	949	1,681
	{ By Servants . . . . .	..	..	763	3,801
	{ By Doors being left open . . . . .	..	..	1,038	2,480
	{ By false Messages, &c. . . . .	..	..	356	993
	{ By lifting up Window or breaking Glass	258	1,043	..	..
	{ By means unknown	449	2,253	..	..
	{ Picking Pockets	396	1,386	..	..
	{ From Drunken Persons . . . . .	..	..	165	1,349
	{ From Children	82	65	..	..
	{ By Prostitutes . . . . .	..	..	683	1,274
	Total	2,233	7,994	6,588	17,860

The amount taken from drunken persons and restored to them when they became sober, was 8,470*l.* in 1836, and 9,430*l.* in 1837.

The value of goods lost by careless exposure and saved or recovered by the police, was 12,800*l.* in 1836, and 13,530*l.* in 1837.

5. *Relapsed Felons*.—The total number of persons apprehended more than once for felony during the years 1836 and 1837 was 1,724.

1327 were apprehended twice.

279 ,, three times.

79 ,, four ,,

39 ,, five ,, and upwards.

From the following Table, which exhibits the ages of the parties, it

appears that 2 children under 10 years of age had actually been apprehended four times; that 11 between 10 and 15 years old had been apprehended 5 times or upwards; and that a far greater proportion of relapses occur, or at least are discovered, among juvenile offenders under 20 years of age. This is particularly the case where the parties have been apprehended more than twice.

Number of times apprehended.	Under 10 years of age.	10 and under 15	15 and under 20	20 and under 30	30 and under 40	40 and under 50	50 and under 60	60 and upwards.	Total.
Twice . .	16	177	452	427	143	71	29	12	1,327
Three . .	1	52	111	79	19	8	6	3	279
Four . .	2	18	34	18	5	1	1	..	79
Five and upwards }	..	11	12	15	1	..	..	..	39
Total . .	19	258	609	539	168	80	36	15	1,724

The next Account contains the number of persons who were apprehended more than once for felony, in each division or district of the Metropolitan Police, during the seven years, from 1831 to 1837.

Local Name of each Division.	Number of Times Apprehended.											
	2	3	4	5	6	7	8	9	10	11	12	
Whitehall . . .	8	1	..	..	..	..	..	..	..	..	..
Westminster . .	423	104	19	5	2	1	..	..	..	..	..
St. James's . .	203	73	37	18	9	6	4	..	..	..	..
St. Mary-le-bone .	191	61	21	10	9	6	6	3	3	3	3	
Holborn . . .	196	31	7	..	..	..	..	..	..	..	..
Covent-Garden .	298	48	12	..	..	..	..	..	..	..	..
Finsl ury . . .	582	106	37	14	7	3	..	..	..	..	..
Whitechapel . .	815	207	66	13	2	1	1	..	..	..	..
Stepney . . .	510	186	90	56	36	22	15	9	4	3	2	
Lambeth . . .	311	137	70	36	26	19	14	8	4	1	..	
Southwark . . .	373	117	42	14	4	1	1	..	..	..	..
Islington . . .	108	16	..	..	..	..	..	..	..	..	..
Camberwell . .	209	94	48	22	14	9	7	3	3	2	2	
Greenwich . . .	153	49	22	9	4	2	..	..	..	..	..
Hampstead . . .	101	18	4	2	..	..	..	..	..	..	..
Kensington . . .	244	94	42	19	9	2	2	1	..	..	..
Wandsworth . .	105	27	9	1	1	..	..	..	..	..	..
Total . .	4,830	1,369	526	219	123	72	50	24	14	9	7	

In the above Table, the numbers in each column include those who had been apprehended more than the number of times to which the column refers; in the following Table the numbers are shown separately, and the proportion of each class to the total number of 120,357 persons apprehended for felony during the period, is exhibited.

Number of Persons Apprehended more than once for Felony.					
Excluding repeated Apprehensions.			Including repeated Apprehensions.		
Number of Times.	Number of Persons.	Proportion to Total Number of Apprehensions for Felony.	Number of Times.	Number of Persons.	Proportion to Total Number of Apprehensions for Felony.
Twice only .	3,461	2·8756	Twice and more .	4,830	4·0130
3 Times only .	843	·7004	3 Times and more	1,369	1·1374
4 „ „ „ .	307	·2550	4 „ „ „ .	526	·4370
5 „ „ „ .	96	·0796	5 „ „ „ .	219	·1819
6 „ „ „ .	51	·0423	6 „ „ „ .	123	·1021
7 „ „ „ .	22	·0182	7 „ „ „ .	72	·0598
8 „ „ „ .	26	·0216	8 „ „ „ .	50	·0415
9 „ „ „ .	10	·0083	9 „ „ „ .	24	·0199
10 „ „ „ .	5	·0041	10 „ „ „ .	14	·0116
11 „ „ „ .	2	·0016	11 „ „ „ .	9	·0074
12 „ „ „ .	7	·0058	12 „ „ „ .	7	·0058

6. *Hackney Coaches, Omnibuses, &c., Summoned.*—The number of hackney-coaches summoned by the police in 1837 was 76; of cabs 229; of omnibuses 187; and of stage coaches 15; making a total of 507 summonses, of which only 20 were discharged by the magistrates. In 1836 the total number was 424. These offences occur principally in the Lambeth district, containing the Elephant and Castle, and in the St. James's district, including Piccadilly.

7. *Public Houses and Beer Shops Summoned.*—There has been a considerable increase of vigilance during the past year on the part of the Police with respect to this class of offences. In 1836, 957 public-houses and 194 beer-shops were summoned for offences against the public peace, for keeping open beyond the proper hours, and for permitting gambling, or intoxication, &c. In 1837 the number of the former class had increased to 546, and the latter to 241. This increase has not been accompanied by any wanton or illegal exercise of power, for the total number of cases in both classes dismissed by the magistrates has only increased from 38 to 51.

8. *Basket People.*—The number of cases of obstruction by people carrying goods for sale in baskets, which were brought by the police before the magistrates, was 361 in 1836, and 334 in 1837. In the former year the goods were forfeited by the magistrate's order in 145 cases, and during 1837 in 112 cases. In the remaining cases the property was restored to the owners. It must be observed that, although the law empowers the police to seize the goods of any basket-people standing on the pavement and thus impeding the path, the Commissioners have given orders that this shall only be enforced when a positive obstruction is caused, or when the parties are found in places where their presence is complained of by the inhabitants as a nuisance, and where the legitimate objects of a hawker's trade do not call them, such as the squares and principal

streets in St. James's and St. George's; and in no case are they arrested without full previous warning. The small number of arrests proves this.

9. *Suicides*.—The following table exhibits the number of suicides committed and attempted, also the number attempted but prevented by the police, in each of the years 1836 and 1837. The increase of fatal attempts in the latter year is remarkable, being no less than 57 per cent. The increase of unsuccessful attempts was not so great, amounting only to 28 per cent. If both classes of attempts be added together, it will appear that 143 cases occurred in 1836, and 204 in 1837, an increase of 42 per cent. This table shows that suicides are more frequent in the hot than in the cold months. In both years the greatest number of cases occurred in May.

Months.	Committed.		Attempted.		Attempted, but prevented by the Police.	
	1836	1837	1836	1837	1836	1837
January. . .	2	8	6	2	2	6
February . . .	3	10	3	2	5	5
March . . .	3	6	5	5	..	2
April . . .	6	15	1	3	..	2
May . . .	12	16	5	9	5	1
June . . .	8	11	3	5	1	1
July. . .	7	8	6	5	1	1
August . . .	3	11	4	7	1	3
September . .	12	10	3	5	2	2
October . . .	9	9	4	4	1	..
November . . .	4	5	3	5	..	5
December . .	6	8	4	6	3	1
Total . .	75	117	47	58	21	29

10. *Fires in London*.—The total number of fires observed and reported by the police in 1836 was 240, exclusive of chimneys; in 1837 it was 229. Of these 104 in the former year, and 59 in the latter, equal to 84 per cent. of the whole number, were extinguished by the police before the arrival of the engines. The estimated amount of loss, generally taken from the statements of the sufferers themselves, was 486,500*l.* in 1836, and 198,559*l.* in 1837. In the former sum is included 400,000*l.*, the estimated loss at the warehouses of Fenning and Co., near London Bridge; and in the latter 150,000*l.*, the loss at Davis's Wharf, at Shadwell. If these two sums be excluded, the loss in the two years amounts to 135,059*l.*

If the fires extinguished by the police before the arrival of the engines, in which case the property destroyed must be of small amount, be excluded, the average loss at each fire will have been 2,266*l.*; if they be included, it will have been 1,460*l.* If these two large fires, and the fires extinguished by the police be excluded, the average loss will have been 444*l.*; and if the latter be included, it will be further reduced to 287*l.*

The season of the year does not appear to have much influence upon

the number of fires. In 1836 the greatest numbers occurred in July and December, the hottest and the coldest months in the year, and in 1837 they occurred in March and October. The average number in the Metropolitan District, exclusive of the city of London, is about 20 in a month.

11. *Lives Saved by the Police and others.*—The number of lives saved by the police from drowning amounted to 83 in 1836, and to 32 in 1837. Twenty-five lives were known by the police to have been saved by other persons in each of the same years.

The number of lives saved by the police from fire was 23 in 1836, and 27 in 1837. Two lives only were known to have been saved by other persons in the two years.

The police also rescued 40 persons from other kinds of death in 1836, and 57 in 1837.

12. *Persons Lost or Missing.*—The number of persons reported to the police as lost or missing during the year 1837 was 560, of whom 330 were found and restored by the police. Of the remainder the greater part returned home of their own accord, or were found by their friends.

13. *Dangerous Accidents; Horses running away.*—The number of dangerous accidents which came within the view of the police, and were reported by them, was 928 in 1836, and 541 in 1837, making a total of 1,469 in the two years. Of this number no less than 561, or 38 per cent. were caused by horses running away.

MORTALITY OF AMPUTATION.

By BENJAMIN PHILLIPS, Esq., F.R.S., Surgeon to the Mary-le-bone Infirmary.

IN November, 1837, a paper was read before the Royal Medical and Chirurgical Society, by B. Phillips, Esq., F.R.S., Surgeon to the Mary-le-bone Infirmary, from which, at our request, the author has extracted a portion, which has great interest, because so few attempts have been made in this country to apply the statistical method of enquiry to the science of surgery. The object of the enquiry was to discover whether the opinion commonly entertained with respect to the mortality succeeding to amputation is correct; and the result is exhibited in a comparative table, prepared from statements obtained from authentic sources in France, Germany, the United States, and Great Britain.

“In the outset, I am bound to express my regret, that the riches of our great hospitals are rendered so little available for enquiries like the present, that these noble institutions, which should be storehouses of exact observation, made on a large scale, and from which accurate ideas should be disseminated throughout the land, are almost completely without the means of fulfilling this very important object.

“If any evidence were necessary to shew the fallacy of resting satisfied with vague impressions, it has been afforded in the progress of the present investigation. It has happened, on several occasions, that the medical men to whom I have applied for the results of their individual experience, have at once said, ‘I rarely lose a case after amputation;’ and when they have referred to their own notes, or to the hospital records (where

such a thing was practicable), they have been astonished at the extent of the mortality. In fact, is it better that the species of loose statistical knowledge which composes most men's experience, be preserved—that, for instance, which enables a man to say, this or that operation is unsuccessful; or that he should be enabled to say, that two out of five, or any other proportion, are the victims of this disease or that operation?

"It may be thought that there are many sources of fallacy in such investigations, and it would be true, were the number too small to overcome it. Much care has been taken, in the present instance, to guard against this evil, and we believe with success. On a former occasion, when treating of the results of the ligature of arteries, I endeavoured to shew that the opinion commonly entertained by medical men, with regard to the mortality succeeding to or consequent upon this operation, is decidedly incorrect. At this time I propose to shew that the mortality after amputation is much greater than is usually believed; and I trust, on some future occasion, to be able to prove that there are very few operations so free from danger, as to justify us in losing sight of that circumstance in coming to a decision upon the propriety of performing them; and, in a large class of operations, in which all that is hoped for is a certain alleviation of suffering, this circumstance should constitute an important element in the decision of the question.

"The amputations included in this enquiry are those of the arm and leg; the whole of them have been performed within the last four years, in civil hospitals, and in the private practice of hospital surgeons. The gross number of cases is 640, and this number embraces *all cases*, acute, chronic, and the results of violence, which have occurred within a certain period, in the practice of the persons by whom the returns have been furnished. Of these cases 490 are reported 'cured,' and the large proportion of 150 died, either in consequence of the operation, or of the progress of the disease or injury, on account of which recourse was had to the operation.

"In comparison with lithotomy, amputation and the ligature of arteries are often, perhaps commonly, held to be unimportant operations; and yet the results show a great balance in favour of the success of lithotomy. It is, however, necessary, in connection with this circumstance, that a fact should be borne in mind, by which these results will be modified. A large number of amputations are performed under very unfavourable circumstances; lithotomy, on the contrary, commonly admits of our choosing a time when the patient is best prepared for it. In other words, the mortality consequent upon lithotomy is commonly the direct effect of the operation; in amputation it is caused by the disease or injury.

"The following table exhibits the proportion furnished by the different countries included in the enquiry:—

	Cases.	Deaths.	
France	203	47	or 23·15 per cent.
Germany	109	26	23·85 „
United States	95	24	25·26 „
Great Britain	233	53	22·74 „
	<hr/> 640	<hr/> 150	

"Here is an average number of deaths, amounting to just 23½ per

cent. If the several countries be taken separately, we find that France is a fraction below this average, that Germany differs only to the amount of a fraction from France, that the United States only exceed the average by a little more than 2 per cent., and that Great Britain is a fraction below either.

"That these returns shew us to be a favoured nation is true; but I apprehend not to the extent that we have been accustomed to believe. Whether we owe this pre-eminence, slight though it be, over the other nations named, to our climate, the constitution of our people, or to our system of treatment, is a matter not easy to determine; at present, we can only state our belief, founded upon the results of great operations performed in France and Germany, that, in as far as those countries are concerned, we are not justified in assuming that climate, mode of life, temperament, or other natural modifying agent, places us in a more privileged position, in as far as ability to resist disease, or to bear up against the effects of operation is concerned, than the natives of those countries; but we are disposed to refer those beneficial results to the superiority of our after-treatment.

"The returns upon which these statements are made are in my possession, and I shall be glad to submit them to any one who may desire to inspect them. I have not set them forth in the paper, because there is great difference in the results, which might easily be explained to the satisfaction of medical men; but which, in non-professional minds, might readily raise a prejudice against the practice of individuals; on which account I have preferred suppressing the names in the memoir."

WELSH FLANNEL TRADE.

Extract from Letter written by WILLIAM AUGUSTUS MILES, Esq., dated December, 1837. Communicated by JOSEPH FLETCHER, Esq.

I HEREWITH send you a few memoranda concerning the hand-loom and flannel-trade in Wales.

The price of wool is below par; about six or seven months ago it fell 30 per cent., but is now looking up a little. The flannel market had been previously dull, and the manufacturers having large stocks on hand, did not avail themselves of the depression in the price of the raw material.

Much of the Welsh wool is sent into England. The manufacturers buy of the farmers and wool-staplers in Wales, and also in the London and Liverpool markets. The New South Wales wool is preferred, as it is nearer in texture to the Welsh wool.

Flannel is of various textures. The coarser wool can only be used in making up the cheaper sort, but it hardly pays; a coarse piece of flannel, which may sell in the market for 5*l.* 10*s.*, cannot be produced by the manufacturer under 5*l.* 9*s.* 6*d.*, of which the labour and machinery amount to 2*l.* 14*s.* 6*d.*, and the wool to 2*l.* 15*s.* No other use can be made of this wool; but this sort of work, though it does not benefit the manufacturer, enables him to give employment to younger hands, and keeps his men employed. It is the custom of the

manufacturers to use up the waste or coarse wool by giving it to young beginners in the trade, deducting one-quarter of the wages for teaching, &c. A beginner, or apprentice, is expected to weave 16 pieces upon these terms, after which he receives the usual wages without reduction: so that in the profits of the manufacturer, must be included the deduction of the beginner's wages.

The Welsh flannel is of much more intrinsic value, being better and firmer made than that of Rochdale, though less "showy" in appearance. The power-loom is not suited to the use of the Welsh wool, and the hand-loom is consequently preferred.

The Mart is held once a fortnight at Newtown, and it is considered a dull market if 700 pieces are not sold,—averaging, perhaps, 11*l.* 16*s.* per piece, and making a total of 8260*l.* The buyers come from England, and the trade is always for ready money, or bills at short dates. Thus the sum of 4190*l.* is weekly paid to the Welsh manufacturers, a great portion of which money is expended in wages and labour, as will appear by the following statement.

A "piece" of flannel consists of about 40 walls (sometimes less or more); a wall is a certain measure containing 12 feet 10 inches. Take a piece of middling quality, of which the selling price is 11*l.* 16*s.*; the component parts of that sum are as follows:—

	£.	s.	d.
Wool, 65 lbs. at 1 <i>s.</i> 6 <i>d.</i>	4	17	6
Oil	0	7	0
Carding and Stobbing	1	2	0
Spinning	1	0	0
Winding	0	2	0
Warping	0	1	6
Size	0	0	9
Weaving, at 1 <i>s.</i> 1 <i>d.</i> per yard	2	3	4
Fulling	0	8	0
	£10	2	1
For Capital, Machinery, Fluctuations of Market, &c. &c.	1	13	11
Selling Price	£11	16	0

From the above statement, the following estimate may be made of Materials, Labour, and Profit:—

Centesimal Proportions:	Material:	£.	s.	d.
Weaving . . . 18	Wool . . .	£1,706	5	0
Fulling . . . 03	Size and Oil . . .	135	12	6
Other Labour . . 20	Labour, including Mill Power:			
Wool . . . 41	Weaving . . .	758	6	8
Size and Oil . . 04	Fulling . . .	140	0	0
Profit, &c. . . 14	Carding, and other } Labour . . . }	796	5	0
	Capital:			
	Profit, &c. &c.	593	10	10
	Total per Week . . .	£4,130	0	0

Or an annual trade, amounting to 214,760*l.*; the greatest portion

of which money, with the exception of payments for wool bought in the English market, is expended in Wales.

The weavers work by the piece or yard, and the prices vary according to the quality of the flannel they are expected to produce; the price per yard consequently varies from 6d. to 1s. 4d., giving an average of about 10d. a-yard. A very skilful weaver may earn, by a piece of extremely fine work, as much as 1l. per week, but the average earnings are about 10s. per week.

The hours in the factory are twelve hours per diem in the winter, and fourteen in the summer, exclusive of two hours for meals.

The weaver's prices never vary. The manufacturers, by a long-established rule, *all* pay the same rate; consequently, the weaver may suffer by diminution of work, but not by deterioration of his wages.

The manufacturers seldom turn off their hands; and if any are out of work, it is generally owing to their own negligence or bad conduct.

Many failures of manufacturers have recently occurred at Newtown, but, nevertheless, I believe few, if any, weavers are out of work, having found employment in other factories.

The reason of these failures may be in some measure attributed to the Joint-Stock Banks, which have lent money and are now calling it in. Many speculating persons borrowed money, and having invested it in trade are obliged to sell their stock to meet the demands of the banks, and bankruptcy is the result.

The effect of this for a time is hurtful to the capitalist, inasmuch as the small manufacturer is obliged to force his sales at any sacrifice, and the more wealthy man is obliged to sell at the other's losing price, or to withhold his stock.

The weavers work in factories at looms provided free of expense; a deduction of about 1s. 6d. a-week is made for bobbins and candles, leaving 8s. 6d. nett to the weaver. Their wives and children are moreover employed in the other processes through which the wool has to pass, such as stubbing, &c.

House-rent is about 5l. or 6l. a-year.

Such is the state of the weaver with regard to wages and labour in Wales. His prices are fixed; he is personally known to the capitalist, and is respected or rejected according to his merit. He has an inducement to behave well, as well as to work well; he finds it to be his interest, and finding that, he learns the value of character as well as of industry.

SUICIDES.

Suicides in Westminster from 1812 to 1836. Extract from Report of Medical Committee of the Statistical Society of London, April, 1837.

THE first statement to which the Committee will draw the attention of the Council is an account of the number of persons, male and female, who have committed suicide, and upon whom inquests have been held, within the City and Liberty of Westminster, in each month from January, 1812, to December, 1836, procured from Mr. Higgs, the Deputy

Coroner of Westminster, with other statements which the Committee has prepared from it.

The Committee deems it right to premise that caution must be used in drawing too general inferences from these statements, on account of the comparatively small number of cases to which they refer. The average annual number of suicides upon which inquests have been held in Westminster does not probably exceed one per cent. of the total number annually committed in Great Britain; hence the number committed in Westminster during 25 years, amounting to 656, is only about 25 per cent. of the whole number annually committed in Great Britain.

For some conclusions, however, they afford sufficient data, and these the Committee will proceed to notice.

It appears from the following Abstract, No. 1, that suicides in Westminster are most prevalent in the three months of June, July, and March, but that the excess is on the part of the males, as the greatest number of female suicides was in January, September, and November. September, August, and October exhibit the smallest number of male and of total suicides; but February, March and April, the smallest number among females.

No. 1.

A Statement of the Total Number of Suicides, of each Sex, committed in Westminster, in each Month during the 25 Years from 1812 to 1836; also the per centage Proportion of the whole Number committed in each Month; and the Proportion which the Number of each Sex bears to the other.

Months.	Total Number of Suicides, from 1812 to 1836.			Per Centage Proportion Committed in each Month.			Per Centage Proportion of Male to Female.	
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
January .	35	20	55	7.3	11.2	8.4	64.	36.
February .	39	12	51	8.2	6.8	7.8	77.	23.
March .	52	11	63	10.9	6.2	9.6	83.	17.
April .	40	11	51	8.4	6.2	7.8	79.	21.
May .	41	15	56	8.5	8.4	8.5	73.	27.
June .	60	15	75	12.6	8.4	11.4	80.	20.
July .	50	16	66	10.5	9.0	10.1	76.	24.
August .	30	15	45	6.3	8.4	6.9	67.	33.
September .	30	18	48	6.3	10.1	7.4	62.	38.
October .	28	15	43	5.9	8.4	6.5	65.	35.
November .	32	17	49	6.7	9.6	7.4	65.	35.
December .	41	13	54	8.5	7.3	8.2	76.	24.
Total .	478	173	656	100.	100.	100.	73.	27.

The last two columns in the above account shew more precisely the proportion of female to male suicides in each month.

The following statement shews the number of times, during the 25 years, that no suicide was committed during each month:—

February . . .	Not once.	July . . .	Twice.	April . . .	} Four times.
January . . .	} Once.	May . . .	} Three times.	October . . .	
March . . .		August . . .		September . . .	} Five times.
June . . .		December . . .		November . . .	

From No. 2, it appears that the average annual number of suicides in Westminster has been increasing in each quinquennial period; but No. 3 shews that it has actually decreased with reference to the increase which has taken place in the population.

No. 2.

A Statement of the Average Annual Number of Suicides, Male and Female, in each Quinquennial Period; also the Proportion per cent. which the two Sexes bore to each other in each period.

Periods of Years.	Average Annual Number.			Proportion of each Sex.	
	Male.	Female.	Total.	Male.	Female.
1812 to 1816	18·2	7·6	25·8	70·	30·
1817 „ 1821	15·0	5·2	20·2	74·	26·
1822 „ 1826	16·4	7·4	23·8	69·	31·
1827 „ 1831	22·0	7·8	29·8	78·	22·
1832 „ 1836	24·0	7·6	31·6	76·	24·
Average of Total	19·1	7·1	26·2	73·	27·

No. 3.

A Statement of the Population of the City and Liberty of Westminster according to each Census, and the Proportion which the Number of Suicides in the Quinquennial Period immediately following each Census bore to the Population.

Dates of Census.	Population.	SUICIDES.		Proportion of Suicides to the Population.
		Quinquennial Periods.	Average Annual Number.	
1811	160,801	1812 to 1816	25·8	One in 6,232
1821	181,444	1822 „ 1826	23·8	7,623
1831	201,604	1832 „ 1836	31·6	6,379
Average	181,283	..	27·06	6,700

It must, however, be taken into consideration, that suicides committed in Westminster may not belong to the population of the district, for that the proximity of the river and other causes existing in Westminster

may attract persons residing in other parts of the town. Hence, an increase or decrease of facilities for committing suicide in the surrounding districts, such as the formation of a canal, &c., will naturally affect the number of such deaths in Westminster*.

ANNUAL REPORT OF THE STATISTICAL SOCIETY OF SAXONY.

Dresden, December 22, 1837.

Translated from the German, by W. R. DEVEREUX, ESQ., ASSISTANT SECRETARY.

At a meeting of the Directory of the Statistical Society of Saxony, held on the 21st of December, the President reported the result of the Society's labours during the past year—the seventh since the commencement of its operations.

The Report commenced by noticing the difficulties and obstacles with which the Society had to contend in executing the various tasks it had undertaken, and by acknowledging that, "The Statistical Manual" (*Staatshandbuch*), published by the Society at the termination of last year, was, in several respects, incomplete. At the same time, in extenuation of these deficiencies, were alleged the novelty of the undertaking, and a consequently imperfect supply of information in some particulars, which, it was hoped, would be more fully elicited in process of time and by additional experience.

The Report then presented, in the following order, a detailed account of the Society's proceedings. The Directory of the Society collects, arranges, and enters in journals, registers, and other books for this purpose, all accurate information which is of such a nature as to be serviceable to the purposes of the State. The facts are afterwards methodically transferred to separate ledgers, each appropriated to an especial subject; and those of peculiar importance, which present information directly useful to the public service, are extracted and laid before the Ministers of the Government; while such as offer a more general utility receive publicity in the pages of periodicals.

To the most interesting classes of facts belong, undoubtedly, the General Surveys of the Church Registry, which present annual accounts, in a systematic form, of every parish, with market-tables exhibiting the quantities and prices of food, and the government taxes levied thereon. In order to exhibit at one view, and thus to afford an easy means of comparing, these several accounts of each market-town, registers have been already introduced, in which each place has its own compartment, where the requisite entries of the different fluctuations are made. By this arrangement is furnished a current statistical chronicle of present facts in each place.

Education, in all its departments, from the highest Academies to the

* This is confirmed by the fact, that within the jurisdiction of the Metropolitan Police, the two districts in which the greatest number of suicides were committed or attempted in 1836 and 1837 were those of the Regent's Park and Stepney, through both of which the Regent's Canal runs. This circumstance tends to shew that drowning is the mode of suicide most frequently resorted to in London, and that a canal offers greater facilities for that purpose than the river.—&c.

most humble Village-Schools, including the various modes of discipline prevalent in Grammar-Schools, Boarding-Schools, Industrial and Sunday-Schools, has always occupied the especial attention of the Society; and all statistical notices relating to these subjects have been not only collected, but annually abstracted and methodically arranged.

The great degree of consideration which has recently been devoted to the subject of Trade and Manufactures will, it is hoped, be evident, on examining the 8th Number of the publication entitled "*Communications of the Statistical Society of the Kingdom of Saxony, 1837**." Enquiries on many other points are at present only in a state of commencement.

Owing to the readiness with which the different officers of the government have supplied the Directory with the requisite documents respecting the duties and taxes imposed throughout the country, it is now enabled to present an exposition of the quantities of meat consumed, the amounts of personal and trade taxes, and the revenue from tobacco and wines.

The prices of wool throughout the past year, with the quantities brought to each market, have also been systematically tabulated, so as to exhibit their principal results.

It is owing, further, to the exertions of the Branch Statistical Associations, as well as to the obliging co-operation of several magistrates and other local authorities, that the Directory has become possessed of very full information respecting the state of the Orphan Asylums, Hospitals, Almshouses, Charitable Institutions, Savings-Banks, Loan-Funds, and Insurance Societies.

The Comptroller of the Post-Office in Saxony has contributed important assistance to the Society by furnishing, from time to time, an account of the number of travellers by Post; and, in future, arrangements will be made to procure an account of letters transmitted through the Post-Offices, distinguishing the circulation of newspapers and periodical publications. An examination of this document will indicate the progress of the taste for reading and literature among the great mass of the population.

* The publication here referred to contains historical and statistical accounts of—

1. The porcelain manufacture at Meissen, where the article commonly known as "*Dresden china*" is principally made.
2. Extensive manufactures of wooden ware, stating the quantities and value of domestic and other utensils, musical instruments, children's toys, wooden combs, wooden chairs, &c., with the numbers and earnings of the work-people.
3. The quarrying and turning of the mineral named the serpent-stone, stating the kinds, quantities, and prices, of the various useful and ornamental articles made of it.
4. The produce and value of the pearl-fishery in the River Elster and several other streams. The pearls are found in a species of muscle, commonly about 6 inches in length and $1\frac{1}{2}$ in width, and are of three kinds—the pellucid, the semi-pellucid, and the sand-pearl.

The following is an abstract of the account,—

In the years	Number of Pearls found.	Value in Dollars.
1719 to 1804	11,286	10,000
1805 to 1825	2,259	2,156
1826 to 1836	1,549	893
Total in 117 years	15,393	13,049

The number of accidents by fire, and the sums paid by the Fire Insurance Offices to restore the buildings consumed, have been collected according to the form prepared in former years; and, after the lapse of some time, will serve to develop an average for future calculations.

It has long been a subject of regret, that the Society has not been able to procure the information requisite to form an extensive statistical account of buildings. An attempt, however, to supply the defect has this year been made by using the building-register now introduced for the purpose of forming a new plan for future fire-insurances, and, should no obstacles intervene, the task undertaken will hereafter be satisfactorily accomplished.

All information concerning fatal accidents and suicides is regularly received by the Society in the original form in which it is collected. It was formerly usual to notice only the most extraordinary circumstances under various aspects; but the remarkable increase of suicides, especially during the last year, has induced the Directory to devote especial attention to the record of these facts. The registers on this subject contain circumstantial details, and exhibit the painful fact that, the number of suicides is continually increasing.

With regard to the judiciary department of statistics, nearly all that was possible had been done; still several new items have been added to the exposition of former years. The lists of law-suits transmitted to the Directory by the subordinate judicial tribunals are in continuation of the previous registrations of the same series of objects. The examination and arrangement of the results of these lists belong certainly to the most laborious and tedious tasks undertaken by the Society. The accounts relating to this subject are finished for 1835 and 1836, and as soon as those for 1837 are completed, the whole will be printed and published, according to previous determination, in a separate form, and will form an appendix to the Society's fifth part of the "Communications." The new matter added thereto in the past year consists of a general review of the verdicts in criminal cases before the supreme courts, including an account of the sentences of death pronounced and executed.

The Directory has taken the necessary steps for procuring statistical facts relating to divorces, as decided in the various courts of appeal in the kingdom; and it already possesses much information, forming materials for an exposition of this nature, so that the Society will soon be able to furnish a complete view of judicial statistics.

With regard to Workhouses and Houses of Correction, the most complete and correct communications are received from the Supreme Commission for that department, and the Directory is thus enabled to enter into very minute particulars relating to these establishments.

The Military Statistics of the kingdom are at present in many points deficient. All, however, that could be elicited from partial communications has been used; and it affords the Directory pleasure to state the following fact connected with this subject. At the request of the Directory, the War Department has appropriated a particular column in its registers for the insertion of the newly-enlisted recruits who can neither write nor read, and hence this class, which originally was very small, is found to be diminishing each successive year.

The requisite information respecting the Police Departments in Dres-

den and Leipzig is carefully communicated to the Directory by the Police Committees of those places; and a series of connected results of several years offers to the statistical enquirer some interesting facts on this subject.

Concerning the relative condition of the native Jews, it was found necessary, in order to judge correctly of the effects of a newly-proposed law relating to them, that the details of their respective trades should be duly collected and arranged, and by the kind co-operation of the Police Committees of Leipzig and Dresden, the task has been accomplished in a satisfactory manner.

The Directory has often had occasion to express its regret at the great deficiency of information for constructing a well-methodised exhibition of Medical Statistics, especially as this department of statistical science is so successfully cultivated in the Prussian dominions. Many adverse circumstances have hitherto prevented the collection of authentic materials. To these, however, access has been obtained in the course of the past year. It was to be expected that the Physicians of Saxony, with the true estimate of science for which they have always been remarkable, would not refuse to assist in these matters, and that an invitation would alone be necessary to ensure their earnest and successful co-operation. Accordingly, not any of the official and town Physicians, or of the public Superintendents of Hospitals, have withheld a promise to forward to the Society, every six months, accounts in conformity with a prescribed plan, of the Medical Statistics of their respective circuits of practice; and many of the profession have proposed to extend the enquiry, which originally included only the most indispensable points, to a general medico-topographical survey of their respective districts; and thus another important step is effected in the progress of Statistical Science in Saxony.

With the view of attempting to supply the defects in the doubtful information hitherto received respecting the agricultural produce of the country, an application, on the part of the Society, has been made to the heads of the Rent-Office and Managers of the Royal Domains, to prepare and communicate annually certain tables exhibiting the extent and quantity of the crops, which, however incomplete, may serve to indicate the average annual produce of the harvest. This request has been granted, and the first task of the Directory in the ensuing year will be to arrange in a proper form the information obtained from this source.

Next to these and various other statistical investigations and collections on local subjects, the most important, and certainly most successful labour undertaken by the Society during the past year, has been the production of new tables of mortality, resting on data of a nature hitherto generally received, and calculated according to peculiar principles. The satisfactory accomplishment of this tardy and laborious task is attributable chiefly to the country clergymen, who, notwithstanding their numerous professional duties, have not shrunk from a statistical undertaking of so much importance, but have most willingly complied with the request of the Society, in transcribing from the Church Registers the requisite lists of deaths. Of these above 300 are in the possession of the Directory, and a satisfactory commencement has been made in the calculation and arrangement of the results. Statistical enquiries of this

description are particularly important, not only to institutions for pensions, loans, and insurances, but as serving the more elevated and general purpose of shewing to what degree of tranquillity, wealth, good morals and proper occupation conduce, especially at certain periods of life, to promote longevity; and, on the other hand, how far immoderate labour, dangerous pursuits, unhealthy localities, ill-conditioned habitations; with poverty and all its attendant anxieties, shorten the usual period which nature has assigned to the life of man.

Saxony, with a comparatively limited territory, possesses a great variety not only of soil and climate, but of economical and manufacturing industry in every department of the arts of civilized life. It has, therefore, a peculiar claim to be regarded as a region for the prosecution of *normal* observations relating to these subjects; the more so, as Providence, during several decennial periods, has protected it from war, dearth, pestilence, and other public calamities which occasion social confusion and alter the natural standard average of mortality. The fact that, in Saxony, the proportion of annual deaths varies from 1 in 19 to 1 in 65, sufficiently displays the important influence of the circumstances here stated (even with respect to the single question of duration of life), and justifies the degree of attention which the Society has bestowed upon them.

The Society experiences the greatest pleasure in observing that its efforts are generally appreciated; that several Foreign Scientific Societies have entered into correspondence with it; and that some of its publications have been translated into foreign languages; and, finally, in thankfully acknowledging the kind co-operation of the local magistracy of the country, and of private individuals, through which the Society's efficiency has been continually increased; it especially would express to the national government its most dutiful acknowledgments of the very important aid received from official authorities, without whose assistance it would have been quite impossible to attain even the approximation towards the prescribed end which has now been effected. But though the Society's operations are yet confessedly incomplete, yet, taking all circumstances into consideration, they are not unsatisfactory.

The present Report is accompanied by several propositions of subjects for the business of the ensuing year, the chief among which is the collection and arrangement of the results of the new census, and the re-publication of the Statistical Manual, with additional improvements.

Particulars connected with the Conveyance of Passengers on the Brussels and Antwerp Railway. By GEORGE LOCH. Read before the Statistical Society of Manchester, January, 1837, and printed in the Miscellaneous Collection of Reports and Papers of that Society, 1838.

CLASSIFICATION of Passengers who travelled on the Railway, between April 30th, and August 15th, 1836.

	Berlines.	Dilligenes.	Churs à banc.	Waggons.
Whole distance . . .	5,069	8,827	37,621	70,900
Short distances, chiefly to and from Mechlin }	1,116	4,938	44,409	196,166
Total . . .	6,185	13,765	82,030	267,066

Supposing the same proportion to be preserved between the 15th August, and the 30th of October, the number of the several classes of passengers, for the whole six months, would be as follows:—

	Berlines.	Diligences.	Chars à banc.	Waggons.
Whole distance . . .	8,593	14,970	63,830	120,290
Short distances . . .	1,987	8,370	75,350	332,810
Total . . .	10,480	23,340	139,180	453,100

Making in all 626,100;—whereas, the actual number who travelled on the Railway during the six months, was 626,125.

The fares for the whole length, or 28½ miles, are:—

	Francs.
By the <i>Berlines</i> , which are similar to our first-class carriages . . .	3.50
By the <i>Diligences</i> , which are covered carriages, carrying fifteen passengers . . .	3.00
By the <i>Chars à banc</i> , which are carriages, having tops, and side covers of canvas . . .	2.00
By the <i>Waggons</i> , which are similar to our second-class carriages, or blues . . .	1.20

In round numbers, then, it appears that of the whole revenue of the Company,

	Francs, for 28½ miles.
5 per cent. is derived from passengers paying at the rate of	3.50
9 " " " "	3.00
32 " " " "	2.00
54 " " " "	1.20

100

It further appears, that nearly one-third of the whole revenue of the Railway is derived from travelling to and from Mechlin, and paying a fare of about 60 centimes, or nearly sixpence sterling. Assuming that the passengers, for short distances, pay on an average one-half of the respective fares for the whole length, the revenue derived from the different classes of passengers will be as follows:—

	Berlines. Fr.	Diligences. Fr.	Chars à banc. Fr.	Waggons. Fr.	Total. Fr.
Whole distance	30,075	44,910	127,660	144,348	346,993
Short distance	3,301	12,555	75,350	199,686	290,892
Total .	33,376	57,465	203,010	344,034	637,885

The result arrived at, on this assumption, varies only about one per cent. from the actual ascertained result, which is 630,915 francs, or about 24,266*l*. This statement is remarkable, as shewing the large proportion of the whole revenue of the Company, which is derived from passengers of the lower class, paying a very low fare.

PROVINCIAL STATISTICAL SOCIETIES IN THE UNITED KINGDOM.

THE Statistical Society of GLASGOW, which was the first Society of the kind in Scotland, was established on the 22d of February, 1836, in order "to collect, arrange, and publish, facts illustrative of the condition and prospects, with a view to the improvement, of mankind." The number of members was originally 41; at present there are 66. The ordinary meetings of the Society are held on the first Thursday of each

of the months of January, March, May, July, September, and November; on which occasions statistical treatises, by members of the Society, are read and discussed. Of the papers read, only two have been published by the Society; viz.,—one, entitled “Comparative Views of the Population of Scotland, with Statements of the excess of Males and Females at different periods,” by Mr. Wilson, of Thornlie: the other, “Statistics of Fever and Small Pox in Glasgow,” by Dr. Robert Cowan; which, it is stated, has been the means of calling public attention to the fearful amount of disease among the destitute poor of Glasgow, and of promoting the establishment of a fever-hospital in that city. A third paper, “On the Western Highlands and Islands of Scotland—their Evils and their Remedies,” by Mr. Allan Fullarton and the Secretary of the Society, is now in the press. The other papers read have not been deemed of such importance as to call for publication by the Society, but were allowed to appear in one or other of the local periodicals.

Of the subjects now engaging the attention of the Society, may be mentioned—“An Enquiry into the Condition of the Working-classes, with respect to Food, Clothing, and Education, in the West of Scotland;” the collection of “Statistics of the Trade between Ireland and Glasgow;” and a Committee has been appointed, and is now engaged in corresponding with Government, regarding the intended Bill for the Registration of Births, Deaths, and Marriages in Scotland.

The Statistical Society of LEEDS was founded on the 17th of January, 1838. The present number of Members is 15. The meetings are held on the third Wednesday in each month, at the room of the Literary and Philosophical Society. The labours of the Society will be directed chiefly, if not altogether, to statistical enquiries relating to the town of Leeds. The following subjects are at present engaging the attention of the Members:—1st, Subjects of enquiry for a statistical account of the borough of Leeds; and the preparation of a catalogue of books in the public libraries of the town relating to statistics. 2d, An account of the schools connected with the manufacturing establishment of Messrs. Marshall and Co. 3d, Medical statistics, as regards the public institutions. 4th, The population-returns of the borough. 5th, The causes of crime, and the effects of punishment on the criminals. 6th, The state of the climbing-boys employed in sweeping chimneys. And, 7th, A history of the union among the operatives engaged in the woollen manufacture of Leeds in 1833-34.

A Society has been recently established in Yorkshire, entitled the “Geological and Polytechnic Society of the West Riding of Yorkshire.” It is to be hoped that it will avail itself of the great advantages which it will possess for acquiring statistical information respecting the great trading interests, and the condition of the labouring population, in the North; and we would invite the attention of its members to the papers of Sir C. Lemon and the Bristol Statistical Society, in the present number of the Journal.

With a view of facilitating communication between the various

Statistical Societies, the following list of the officers of each is inserted:—

	President.	Secretaries.
Manchester	Thos. Ashton, Esq.	Jas. Heywood, Esq. Wm. McConnell, Esq.
Liverpool	Earl of Derby	W. H. Duncan, Esq., M.D. J. W. Harden, Esq.
Bristol	Marquis of Lansdowne	Rev. J. E. Bromby.
Birmingham	J. Corrie, Esq.	Rev. T. O. Ward.
Leeds	Samuel Hare, Esq.	Edward Nevins, Esq.
Glasgow	Archibald Alison, Esq.	C. R. Baird, Esq.
Glasgow and Clydesdale	Jas. Cleland, LL.D.	Wm. Davidson, Esq.
Ulster	Marquis of Donegal	Edmund Getty, Esq. Francis Whitla, Esq.

PROCEEDINGS OF STATISTICAL SOCIETIES, &c.

STATISTICAL SOCIETY OF LONDON.

Ordinary Meeting, Monday, May 14th, 1838.

DURING the early part of the meeting the Chair was taken by the Right Hon. STURGES BOURNE, Vice-President, and afterwards by Earl FITZWILLIAM, the President.

The following Gentlemen were balloted for, and were elected Fellows of the Society:—

Edward William Wynne Pendarves, Esq., M.P.; Dr. James Phillips Kay, Assistant Poor Law Commissioner; John Mitchell Kemble, Esq.; Dr. John Baron, of Cheltenham; Captain Alexander M. Tulloch, War Office; Thomas Wilson, Esq., of Banks, near Barnsley, Yorkshire.

The first paper read was an abstract and analysis of the Commissioners' Report on the Endowed Charities in Cornwall, by James Whishaw, Esq., F.S.A., which will appear in a future number of the Journal.

A letter was read from the Superintendent of the Statistical Department of the Board of Trade, transmitting, from the Right Honourable the President of that Board, a series of Agricultural Returns from 27 parishes in the county of Bedford, in the year 1836. (See page 89.)

It was proposed and resolved, "That the Meeting do recommend to the Council to institute an enquiry into the condition of the working-classes in Westminster."

The following Gentlemen were then proposed as candidates for admission into the Society:—

The Lord Bishop of Durham; Charles Wykeham Martin, Esq., of Leeds Castle, Kent; Samson Ricardo, Esq.; and George Lillie Craik, Esq.

The last meeting during the present session will take place on Monday, the 18th of June.

STATISTICAL SOCIETY OF ULSTER.

The Second General Meeting of this Society was held on the 18th of May. The Secretaries reported progress from the Committees on Education—on the Trade between Great Britain and Ireland—on the Physical and Intellectual State of the Working Classes—on Mechanical

Power—and on Agriculture. Thirty new Members were then elected, and the two following Gentlemen were appointed Honorary Members:—G. R. Porter, Esq., F.R.S.; and Rawson W. Rawson, Esq., Honorary Secretary of the Statistical Society of London. Captain Portlock, R.E., Vice-President, then read a paper “Upon the Objects and Advantages of Statistical Enquiries,” which he was requested to publish for the use of the Society.

The Society now consists of 97 Ordinary and two Honorary Members. The next General Meeting will be held on Friday, the 8th June.

The Statistical Society of LIVERPOOL has commenced an enquiry into the moral and physical condition of the working-classes in that town, similar to those which have been prosecuted in Manchester, Marylebone, and Bristol.

The following may be quoted among the many proofs of the progress which the study of Statistics is making in this country. A premium is annually offered by the Faculty of the Belfast College, to the students in that institution, for “A Statistical Account of some Parish or District in Ireland, to be written after the best Models.” The successful candidate during the last session was William Johnston, of Tullylish, in the county Down, for a Statistical Account of that parish.

M. le Commandeur de Moutinho, Brazilian Minister in France, has offered a gold medal of 1000 francs to the author of the best work on the Statistics of the Empire of Brazil, to be awarded by the Statistical Society of Paris.

RECENT STATISTICAL PUBLICATIONS.

A History of Prices, and of the State of the Circulation from 1793 to 1837, with a Sketch of the State of the Corn Trade in the last two Centuries. By Thomas Tooke, Esq., F.R.S.

The author has entered anew upon the question treated in his former work, published fifteen years ago, a second edition of which has long been desired by the public. The present volumes, although different in arrangement and details, and embracing a much longer and very eventful period, continue the same line of argument and propose to establish the same conclusions. They treat of the various causes which have influenced prices in this country since the year 1792 to the present time, examining separately the effects of variations in the seasons—of war—and of the currency; and tracing their respective operation in an historical Sketch of Prices, and of the State of the Circulation throughout the above period.

Germany; the Spirit of her History, Literature, Social Condition, and National Economy, illustrated by Reference to her Physical, Moral, and Political Statistics, and by Comparison with other Countries. By Bisset Hawkins, M.D. and F.R.S.

The object of the author is to contribute to the science of State Economy, which he considers to be distinct from, and more interesting to society than, Political Economy, the latter of which forms only a section of the former, and confines itself to the production and distribution of wealth; while the former includes the whole internal regulation of States, their resources, their composition, and their means of improvement.

YEOMANRY.

Statements relating to Yeomanry in the United Kingdom.

	Corps.	Troops.	Privates.
The Force before the Disbandment in 1827 . . .	124	500	24,288
„ Disbanded in 1827	86	290	13,411
„ Not Disbanded	38	210	10,877
Of whom continued to receive pay . .	22	144	7,725
„ serve without pay	16	66	3,152
The whole Force in December, 1837	92	337	18,303
Reduced in February, 1838	46	86	4,709
The whole Force remaining in 1838	46	251	13,594

The Irish Yeomanry was wholly disbanded on the 31st March, 1834.

An Account of the Strength and Expense of each Corps of Yeomanry Retained and Disbanded in 1838.

Counties.	Corps.	Retained.				Disbanded.			
		Troops.	Officers.	Men.	Expense in 1836.	Troops.	Officers.	Men.	Expense in 1836.
ENGLAND.					£.				£.
Berks . .	Hungerford	1	3	53	221	..	..	..	..
	Vale of White Horse . . . . .	..	..	..	..	1	3	44	182
	Welford and Newbury . . . . .	..	..	..	..	1	3	39	184
	Woolley . . . . .	..	..	..	..	1	4	75	310
Bucks . .	Second Bucks	8	26	430	2,563	..	..	..	..
	Taplow . . . . .	..	..	..	..	1	3	46	272
Cambridge	Whittlesea	1	3	57	232	..	..	..	..
Cheshire . .	King's Cheshire	11	34	549	4,081	..	..	..	..
Cornwall . .	Duke of Cornwall's . . . . .	..	..	..	..	3	10	139	938
Derby . .	Derby and Chaddesden	1	3	57	275	..	..	..	..
	Radbourne	1	2	90	424	..	..	..	..
	Repton and Gresley . . . . .	..	..	..	..	1	4	66	260
	Wirksworth . . . . .	..	..	..	..	1	3	68	398
Devon . .	Royal First Devon	9	33	415	2,674	..	..	..	..
	North Devon	8	26	361	2,346	..	..	..	..
	South Devon . . . . .	..	..	..	..	3	11	139	979
	East Devon . . . . .	..	..	..	..	8	9	171	1,131
	North-east Devon . . . . .	..	..	..	..	1	2	51	296
Dorset . .	Dorset	5	21	310	1,720	..	..	..	..
	Blandford . . . . .	..	..	..	..	1	3	68	287
	Wareham . . . . .	..	..	..	..	1	4	73	280
	Wimborne . . . . .	..	..	..	..	1	2	52	209
Essex . .	West Essex . . . . .	..	..	..	..	1	4	78	479
Gloucester	Gloucestershire	7	29	481	2,385	..	..	..	..
Hants . .	North Hants	5	15	145	967	..	..	..	..
	Andover . . . . .	..	..	..	..	1	4	79	258
	North Avon . . . . .	..	..	..	..	1	2	47	208
	South Avon . . . . .	..	..	..	..	1	2	45	180
	Fordingbridge . . . . .	..	..	..	..	1	3	57	244
	New Forest East . . . . .	..	..	..	..	1	3	48	240
	West . . . . .	..	..	..	..	1	4	69	290
	Lymington (without pay)	1	4	59	218	..	..	..	..
	Romsey . . . . .	..	..	..	..	1	3	28	121
Herts . .	Northern Herts (reduced)	1	3	46	212	..	..	13	..
	Southern Herts (reduced)	4	16	185	1,107	..	..	25	..
	Gilton (reduced)	1	3	46	350	..	..	23	..
Kent . .	East Kent (reduced)	4	15	200	1,480	2	5	59	..
	West Kent (reduced)	4	15	200	1,599	3	10	138	..
Lancaster . .	Duke of Lancaster's	3	10	167	1,147	..	..	..	..

Counties.	Corps.	Retained.				Disbanded.			
		Troops.	Officers.	Men.	Expense in 1836.	Troops.	Officers.	Men.	Expense in 1836.
Leicester	Leicestershire	10	31	606	3,031	..	..	..	..
Lincoln	North Lincoln	8	16	235	839	..	..	..	..
	Lincoln Heath . . . .	..	..	..	..	1	3	60	358
Middlesex	Uxbridge	2	4	60	235	..	..	..	..
Norfolk	Norfolk	3	9	191	573	..	..	..	..
Northampton	Brackley and Clipping } Warlen	2	6	80	548	..	..	..	..
	Kettering	1	3	68	304	..	..	..	..
	Oundle . . . . .	..	..	..	..	1	4	78	286
	Thrapston . . . . .	..	..	..	..	1	3	64	248
	Towcester	1	4	83	393	..	..	..	..
	Wellingborough . . . .	..	..	..	..	1	3	58	294
Northumber- } laud	Northumberland and } Newcastle	7	25	411	2,265	..	..	..	..
Nottingham.	Southern Nottinghamshire	5	23	390	2,446	..	..	..	..
	Sherwood Rangers . . .	3	13	216	1,430	..	..	..	..
Oxford	Queen's Royal	6	22	328	2,099	..	..	..	..
	Watlington . . . . .	..	..	..	..	1	3	56	218
Salop	North Salopian	8	26	426	2,709	..	..	..	..
	South Salopian	6	18	314	2,112	..	..	..	..
Somerset	North Somerset	10	25	477	2,694	..	..	..	..
	West Somerset	8	25	500	2,953	..	..	..	..
	Ilminster . . . . .	..	..	..	..	1	3	62	249
	Martock . . . . .	..	..	..	..	1	3	62	262
	Mudford . . . . .	..	..	..	..	1	3	68	204
	Taunton . . . . .	..	..	..	..	3	10	169	1,101
Stafford	Staffordshire	9	41	692	4,126	..	..	..	..
Suffolk	First Loyal	1	3	53	261	..	..	..	..
	Long Milford . . . . .	..	..	..	..	1	4	78	409
	Suffolk Borderers . . .	..	..	..	..	1	3	39	167
Surrey	Surrey	8	26	246	1,324	..	..	..	..
Sussex	Arundel and Bramber	3	10	132	857	..	..	..	..
	Petworth . . . . .	..	..	..	..	1	3	50	56
Warwick	Warwickshire	6	22	394	1,860	..	..	..	..
Westmorland	Westmorland	5	16	285	1,738	..	..	..	..
Wilts.	Royal Wilts	10	33	391	2,298	..	..	..	..
	Ramsbury . . . . .	..	..	..	..	1	3	38	115
Worcester	Worcestershire	10	37	679	4,142	..	..	..	..
York	York Hussars	10	35	501	3,116	..	..	..	..
	South-west York . . .	12	40	553	3,506	..	..	..	..
	North York . . . . .	..	..	..	..	4	13	185	1,202
WALES.									
Denbigh.	Denbighshire (reduced)	3	11	100	1,632	2	6	155	..
Flint.	Flintshire . . . . .	..	..	..	..	4	14	220	1,391
Montgomery	Montgomeryshire . . .	4	13	264	1,751	..	..	..	..
Pembroke	Castlemartin	3	11	139	941	..	..	..	..
SCOTLAND.									
Ayr	Ayrshire	6	27	475	2,831	..	..	..	..
Fife	Fife . . . . .	..	..	..	..	6	20	305	1,815
Kirkcudbright	Kirkcudbright . . . .	..	..	..	..	1	3	56	320
Lanark	Upper Ward	4	14	231	1,462	..	..	..	..
Lothian	Mld Lothian . . . . .	..	..	..	..	8	28	388	2,076
	East Lothian . . . . .	..	..	..	..	1	3	66	354
Renfrew	Renfrewshire . . . . .	..	..	..	..	4	14	252	1,439
Stirling	Stirling . . . . .	..	..	..	..	5	19	223	1,115
Wigtown	Wigtown . . . . .	..	..	..	..	1	3	54	310
	Stranraer . . . . .	..	..	..	..	1	3	54	334
	Total	246	850	13,241	80,602	84	276	4,699	22,040
	Two Corps disbanded in } 1836-7 . . . . .	..	..	..	..	5	17	204	1,018
	Other Expenses . . . .	..	..	..	..	..	..	..	552
	Total Force in 1837 (92 } Corps) and Expense in } 1836 . . . . .	..	..	..	..	246	850	13,241	80,602
	Total Force in 1837 (92 } Corps) and Expense in } 1836 . . . . .	..	..	..	..	335	1,143	18,144	104,212

Since the Returns from which the above Statements are prepared were presented to Parliament, an alteration has been determined upon with respect to the Hertfordshire Corps; the Glinton Troop is not to be disbanded, but the three Corps are to be partially reduced as vacancies occur.

Commons' Papers, Sess. 1837-8, Nos. 76, 224, 247. Lords' Papers, Nos. 104, 159.

MISCELLANEOUS.

Grand Junction Railway; Detentions.—The following is an account of the arrivals of 560 mail-trains by the Grand Junction Railway at Liverpool, Manchester, and Birmingham, respectively, during 20 weeks between July and November, 1837:—

	Before Time.	At the Exact Time.	After Time.
Liverpool . . .	176	113	271
Manchester . . .	171	91	298
Birmingham . . .	102	76	382

Of the 1120 journeys which were performed, reckoning Liverpool and Manchester as one, 24 exceeded the time more than $1\frac{1}{2}$ hour, and 10 more than 2 hours. The greatest delay was $12\frac{1}{2}$ hours; the quickest journey was performed in 45 minutes less than the fixed time.

The causes of delay were reported in 471 cases, viz.—

Broken axles of engines, tenders, and waggons	19
Failures of pumps, eccentrics, connecting-rods, cotters, &c.	34
Bad coke, and fires burnt out, &c.	42
Heavy trains	59
High winds	25
Obstructions from cattle, waggons, and break-down	13
Detentions from goods and second class trains, &c., on Liverpool and Manchester Railway	107
Engine more or less out of order, the number not being sufficient	68
Rails slippery	26
Detentions in watering	22
Horses kicking out the sides of horse-boxes	4
Waiting for London mails at Birmingham (time deducted)	7
Engine and waggons getting off the road at points	6
Waiting for Manchester train at Warrington	39

Total 471

Commons' Paper, 1837-8, No. 257.

Slave Trade.—Number of slaves on board the slave-ships captured during the last ten years, and of the amount of money paid to the captors in each year, from 1830 to 1837:—

Years.	Number.	Amount.
		£.
1828	5,582	..
1829	6,607	..
1830	6,509	84,117
1831	1,851	27,309
1832	3,399	17,695
1833	3,427	17,907
1834	5,761	18,158
1835	7,711	40,836
1836	8,930	31,781
1837	6,146	44,567
Total . .	55,923	282,370
Average.	5,592	35,296

Of the total number of slaves 36,377 were landed at Sierra Leone, 8,538 at the Havana, 3,059 at the British West Indies, and 615 at Fernando Po. The number landed at Rio de Janeiro was small, but it is not stated exactly. Of 650 slaves taken in the "Minerva," by H. M. S. Pelorus, 186 died before landing, and of 712 taken in the "Formidable," by H. M. S. Buzzard, 294, or 41 per cent., died before landing.

No British slave-vessel was captured during this year.

Of the total amount paid to the captors, 24,252*l.* was out of the proceeds of the vessels captured; the remainder was for bounty. The sum received by the crown during the same period, for its moiety of the proceeds of slave-vessels captured, was 44,433*l.*

Lord's Papers, 1837-8, Nos. 73 and 145.

Irish Packet Service.—The usual time occupied in the voyage from Liverpool to Kingstown by the Post-Office Packets is from 11½ to 14 hours. The longest voyage in the four years from 1834 to 1838 was 29½ hours, and the shortest was 9½ hours. In the passage from Hobb's Point, S. Wales, to Waterford, the usual time is from 10 to 12 hours; the longest voyage in 1837 was 30 hours 4 minutes, and the shortest was 8 hours 18 minutes.—Commons' Paper, 1837-8, Nos. 103 and 349.

Registered Electors in the United Kingdom.—In the year 1834-5, the number was as follows:—

	England.	Wales.	Scotland.	Ireland.	Total.
Counties . . .	357,033	26,796	36,677	65,358	485,864
Boroughs . . .	273,668	11,128	36,043	32,648	353,487
Total . . .	630,721	37,924	72,720	98,006	839,371
Male Population in 1831	Total . . . 6,376,627				
20 years of age . . .	3,199,984	194,706	549,821	1,867,765	5,812,276
Per-centage proportion of electors to the male population 20 years of age	19.71	19.47	12.86	5.24	14.44

In 1835-6 the number of electors registered, of which an account has been furnished to Parliament, was—

	England.	Wales.	Scotland.
Counties . . .	435,350	31,898	41,885
Boroughs . . .	301,966		
Total . . .	737,316		
Exhibiting an increase of . . .	78,297=21 per cent.	5,102=19 per cent.	5,208=14 per cent.
	28,052=10 , ,		
Total . . .	106,349=16 per cent.		

The above statements do not include the Universities of Oxford and Cambridge, Trinity College, Dublin, nor the Isle of Wight.

Parliamentary Papers.

Woollen Manufactures—Trade with the United States, 1837. Value of British Woollen Manufactures exported from the United Kingdom:—

Years.	Total. £.	To the United States. £.	To other Countries. £.
1835	6,840,511	2,621,270	4,219,241
1836	7,639,353	3,173,644	4,465,709
1837	4,655,977	1,045,279	3,610,698*

Commons' Paper, 1837-8, No. 340.

Linen Manufactures—Trade with the United States, 1837. Value of British Linen Manufactures exported from the United Kingdom:—

Years.	Total. £.	To the United States. £.	To other Countries. £.
1836	3,326,325	1,687,877	1,638,448
1837	2,127,445	584,597	1,542,848

Commons Paper, 1837-8, No. 343.

* Of this deficiency 510,000*l.* was in the trade with the East Indies. The exports to Germany and the Netherlands had increased in 1837.

Lines, Yarn.—Exports to France:—

Years.	Quantities.			Value.
	Total.	To France.	To other Countries.	Total Amount.
	lbs.	lbs.	lbs.	£.
1833	935,682	867,288	68,394	72,006
1834	1,533,325	1,430,369	102,956	136,312
1835	2,611,215	2,384,678	226,537	216,635
1836	4,674,504	4,012,141	562,363	318,772
1837	8,373,100	7,010,983	1,262,117	479,307

Commons' Paper, 1837-8, No. 343.

Medical Officers of Unions.

	No. of Medical Officers.	Total Area.		Total Population.	Average Area of each Officer's District.	Average Population of each Officer's District.
		Acres.	Sq. Miles.		Sq. Miles.	
Norfolk . .	87	1,129,060	14,113	266,003	20½	3057
Suffolk . .	78	824,160	10,302	256,185	15½	3284

Commons' Paper, 1837-8, No. 232.

Self-Supporting Dispensaries.—The following statement exhibits a view of the operations of three establishments of this nature for a number of years, and of the average cost of maintaining them:—

	Number of Years to which this Account refers.	Average Number of Cases attended to each Year.	Average Annual Expenses.			Average Annual Cost per Case.		
			Medical.	Other.	Total.	Medical.	Other.	Total.
			£.	£.	£.	s. d.	s. d.	s. d.
Coventry . .	6	1,711	379	77	456	4 5	0 9	5 4
Burton-upon-Trent . .	2	1,385	309	27	336	4 5½	0 5	4 10½
Derby . . .	6	1,216	205	84	289	3 4½	*1 4½	4 9

Commons' Paper, 1837-8, No. 222.

Bankruptcies, 1832 to 1837.—The number of fiats of bankruptcies issued in England and Wales during the year 1832 (ending 11th January, 1833) was 1,700. In 1833, it fell to 1,283, at about which number it remained until 1837, when it rose to 1,939, an increase on the preceding year of 52 per cent. This great increase consisted almost entirely of country fiats, which rose from 724 to 1408, or 94 per cent.

* The excessive amount of Miscellaneous Expenditure, at Derby, consists chiefly of rent, rates, taxes, coals, and lighting.

The number of town fiats did not exceed the average of the preceding four years.

It appears that only 77 per cent. of the fiats which are issued are opened; and that the proportion of town fiats opened is greater than that of country fiats, being 84 per cent. of the former, and 73 of the latter.

Commons' Paper, 1837-8, No. 239.

INTOXICATION A SOURCE OF CRIME.

THE Rev. John Clay, Chaplain to the Gaol at Preston, has for some years past collected very valuable details of the causes which have led to the offences for which prisoners confined in that gaol have been committed. They have been obtained chiefly by personal enquiry from the parties themselves, who are stated to manifest generally a great degree of candour in detailing the circumstances connected with their offences. Between the October Sessions of 1832, and the July Sessions of 1837, exactly 1000 persons were committed to that Gaol for Felonies; and of these no less than 455, or 45½ per cent., arose from drunkenness directly connected with the crime,—either from offences which took place in public-houses and beer-shops, or when the offender or the party upon whom the offence was committed, was in a state of intoxication. The cases of habitual drunkards, whose excesses have at length led them into serious violations of the law, are not included; but there can be little doubt that in a large proportion of the cases placed under the head of "Idleness and bad Company," and in the three following classes, intoxication has been the original cause which has led to crime. Mr. Clay expresses his opinion, that if all the particulars connected with a criminal's guilt were made known, or if his general habits could be ascertained, drunkenness, which now appears to account for 45½ per cent. of the offences, would manifest itself as little short of the universal cause of criminality.

Drunkenness	455
Want and Distress	76
Temptation	48
Neglect of Parents	6
Combination	11
Weak Intellects	8
Idleness and bad Company	88
Idleness and Ignorance	18
Confirmed bad Habits	38
Alleged Innocence; and various or uncertain causes	252
Total	1000

It is surprising how few prisoners have urged the plea of want in extenuation of their offences; it might have been supposed that they would be inclined to disguise the true origin of their delinquencies, and would be prone to plead distress and poverty rather than a propensity to intoxication; but the fact is otherwise, and the proportion of offences attributed to want is only 7½ per cent.

A comparison of the effects of drunkenness in the two principal classes of offences, felonies and assaults, exhibits the result which might have been anticipated; the number of the latter class, arising

from intoxication, considerably exceeds that of the former, and amounts to 64 per cent., while in the felonies it did not exceed 34 per cent.

	Felonies.	Assaults.
Drunkenness	121	107
Idleness and bad Company	37	7
Confirmed bad Habits	25	2
Want	30	1
Temptation	36	..
Combination . . . . .	..	7
Weak Intellectuals	4	5
Uncertain	95	38
Total	<u>348</u>	<u>167</u>

Dram Drinking in London.—The following Statement of the Number of Persons who went into 14 of the leading Gin-shops in London during one week in the year 1833, is contained in the Evidence given before the Select Committee of the House of Commons on Drunkenness in 1834. It was procured by persons set to watch and count the persons as they entered the shops.

	Men.	Women.	Children.	Total.
On Mondays	23,758	17,552	3,052	44,362
Middle of the Week	20,475	15,455	2,762	38,692
Saturdays	27,005	21,599	3,350	51,954
Sundays	17,795	13,264	2,330	33,389
Total for four Days	89,033	67,870	11,494	168,397
„ three Days, by calculation, deducting one-fifth . . . }	53,420	40,723	6,897	101,041
Total for one Week	142,453	108,593	18,391	269,438
Average of each House per Day . . .	1,453	1,108	187	2,749
„ „ per Week	10,174	7,756	1,313	19,245

It appears from the above, that if the attendance during the middle of the week be taken as a standard of comparison, the increase on Mondays is equal to $14\frac{3}{4}$ per cent., and on Saturdays amounts to $34\frac{1}{4}$ per cent., while on Sundays the decrease is 16 per cent. The largest attendance observed during a single day at one of the shops in question occurred on a Monday, when the numbers amounted to 6021; the smallest was 1146.

It is stated, that by far the largest proportion of those who went in took a glass or more of spirits; but of the children, whose ages varied from 6 to 16 years, about one-half entered with bottles to fetch spirits for their parents or friends.

Church Building Materials.—The amount of all drawbacks allowed on building materials used in the erection of places of public worship in Great Britain, from April, 1817, to April, 1837, was 170,561*l.*, divided among 609 edifices, or, on an average, 280*l.* to each.

Commons' Paper, 1837-8, No. 325.

Municipal Boundaries Commission.—Total amount of expenses of the reports, surveys, maps, and printing of the Municipal Boundaries Commission, to April, 1838, 21,623*l.*

Commons' Paper, 1837-8, No. 347.

Exports from Jamaica.—The Lords' Paper, No. 70, of the present session, contains an Account of the Exports from Jamaica in each year from 1772 to 1836. The following extract shews the rapid decrease in the exportation of the staple produce since the year 1833:—

Years.	Sugar.			Rum.			Mo- lasses.	Ginger.		Pimento.		Coffea.
	Hhds.	Tierces.	Barrels.	Punches.	Hhds.	Casks.	Casks.	Casks.	Bags.	Casks.	Bags.	Pounds.
Average of 7 Years, 1827 to 1832	93,156	9,078	3,383	34,354	3,663	1,258	313	4,499	182	3,333	29,348	20,933,705
1833	78,375	9,325	4,074	33,215	3,034	977	755	4,818	93	7,741	58,581	9,966,060
1834	77,801	9,860	3,055	30,493	2,898	1,288	486	5,925	116	496	99,301	17,725,731
1835	71,017	8,840	3,455	26,433	1,820	747	300	3,985	486	1,115	59,033	10,693,018
1836	61,644	7,707	2,497	19,938	874	646	182	5,324	69	227	46,779	13,448,063

The greatest exportations occurred between the years 1801 and 1821. In 1822 they fell off greatly, with the exception of coffee, and have not since revived. The largest sugar-crop occurred in the year 1805, when the exports of that article amounted to 137,906 hogsheads. In the following year the largest exportation of rum took place, viz., 58,191 punches. The largest coffee-crop occurred in 1814, when the quantities exported amounted to 34,045,585 lbs. The seasons in the three years 1834 to 1836 are stated to have been favourable.

STEAM SHIPS.

Log of the "Great Western" Steam-Ship, James Hoskin, R.N., Commander, on her Voyage from Bristol to New York, April, 1838.

Dates.	Course.	Dis- tance.	Latitude.		Longitude.		Wind.	Remarks on Weather.
			Account.	Obs.	Account.	Chron.		
April 8 10 p.m.	..	..	Sandy I.	..	..	..	N.W. N.N.W.	Strong gales.
April 9	West.	240	..	50° 27'	..	07° 32'	N.N.W. and S.W.	Moderate.
.. 10	78° 30' W.	213	49° 45'	50° 00'	12° 50'	12° 16' 45"	W. by N. and S.W.	Moderate.
.. 11	W. by S.	206	49° 04'	48° 11'	17° 25'	17° 10'	S.W. and E. by S.	Moderate and hazy; rough at night.
.. 12	W. & S.	231	47° 47'	47° 17'	22° 48'	23° 05' 10"	E. by S.E. to S.E.	Moderate and cloudy.
.. 13	W. & S.	218	46° 56'	46° 56'	23° 09'	23° 27'	E.S.E.	Light Winds.
.. 14	W. & S.	218	46° 26'	46° 23'	33° 40'	34° 09'	S.W. and S.S.W.	At 10 p.m. squally, with small rain.
.. 15	W. by S.	241	45° 24'	45° 12'	39° 43'	39° 38' 30"	S.E. to S.W. by S.	Strong and equally, vessel lurching deeply, but easy.
.. 16	W. & S.	243	44° 46'	44° 34'	45° 19'	45° 31'	Variable.	Squally.
.. 17	W. & S.	185	44° 07'	44° 10'	49° 46'	49° 21'	S.W. to W.N.W.	Strong gales and heavy sea.
.. 18	W.S.W.	169	43° 02'	42° 58'	52° 55'	52° 30'	{W.N.W. to W. by N.	Moderate.
.. 19	W. & S.	206	42° 02'	42° 02'	56° 59'	56° 49' 45"	S.W.	Strong winds and heavy sea.
.. 20	W. & S.	183	41° 36'	No obs.	60° 54'	No obs.	S.W. W.N.W.	Strong winds and heavy sea; ship very easy.
.. 21	W. & S.	192	41° 05'	40° 30'	65° 05'	64° 24' 13"	N.N.W.	Light winds and cloudy.
.. 22	.. 79° W.	198	39° 48'	39° 41'	68° 38'	69° 03' 30"	N.N.W. to W.N.W.	Strong winds and frosty.
.. 23	S. 79° W.	230	..	..	..	..	N.N.W. to N.	Fine weather, at 10 received a pilot.
To harbour . .	..	50						

Total . 3,323 miles; average rate of steaming per day, 211 miles.

From the "New York Commercial Advertiser."

Abstract of the Log of the Steam-Ship "Sirius," Lieut. Richard Roberts, R.N., Commander, on her Voyage from Cork to New York, April, 1838.

Dates.	Course.	Distance.	Lat. N.	Long. W.	Wind.	Remarks on Weather.
April 4	.. ..	..	..	..	West.	Noon, left Cork harbour.
.. 5	S. 71 W.	89	50° 56'	11° 44'	West.	Strong breeze, head wind.
.. 6	S. 78 W.	108	50° 25'	14° 24'	W. by N.	Fresh wind and squally.
.. 7	S. 72 W.	108	49° 51'	17° 03'	N.W. by N.	Heavy gales with very heavy sea.
.. 8	S. 13 W.	125	49° 15'	20° 5'	W. by N.	Strong breeze with heavy sea.
.. 9	S. 41 W.	136	47° 33'	22° 19'	W. by N.	Strong breezes with heavy squall and sea.
.. 10	S. 64 W.	94	46° 48'	24° 22'	West.	Fresh gales with heavy sea.
.. 11	S. 77 W.	176	46° 13'	28° 25'	N.E.	Fresh gales, first part; head-wind latter part.
.. 12	S. 71 W.	196	45° 09'	32° 50'	East.	Light winds and fine, with heavy sea.
.. 13	S. 80 W.	210	44° 32'	37° 40'	E. by S.	Light winds and fine weather.
.. 14	S. 80 W.	218	44° 03'	42° 24'	South.	Moderate and fine.
.. 15	S. 80 W.	203	43° 30'	47° 07'	S.W.	With heavy sea; latter part fresh gales.
.. 16	S. 77 W.	197	42° 48'	51° 15'	S.W. to N.W.	First part moderate and fair.
.. 17	S. 70 W.	117	42° 08'	53° 45'	W.N.W.	Violent gales with very heavy sea.
.. 18	West.	138	42° 08'	56° 48'	W.S.W.	Strong breezes with heavy sea.
.. 19	N. 87 W.	163	42° 16'	60° 28'	S.W. by W.	Strong breeze and squally, with rolling sea.
.. 20	S. 80 W.	214	41° 31'	64° 21'	W. by S.	Fresh breezes and cloudy.
.. 21	S. 87 W.	209	40° 15'	68° 25'	N.N.W.	Moderate and fine weather.
.. 22	S. 86 W.	195	40° 00'	72° 38'	N.W.	Fresh breezes add cloudy.
Total . 2,896 miles; average rate of steaming per day 161 miles.						

From the "New York Commercial Advertiser."

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ending 3rd April and 1st May, 1838.

Quarters ending	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
3rd April .	£. 18,967,000	£. 11,262,000	£. 30,249,000	£. 22,832,000	£. 10,126,000	£. 32,958,000
1st May .	£. 19,084,000	£. 11,006,000	£. 30,090,000	£. 22,768,000	£. 10,002,000	£. 32,770,000

Weekly Average Prices of Corn in England and Wales, in the Month of April, 1838.

	Weeks ending April.				
	6th.	13th.	20th.	27th.	Average of the Month.
	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat	58 8	58 10	58 9	59 0	58 9
Barley	29 9	30 1	29 10	29 9	29 10
Oats	21 4	21 10	21 8	21 10	21 8
Rye	31 7	31 8	31 4	32 9	31 10
Beans	33 11	34 2	34 9	34 9	34 4
Peas	33 1	31 11	33 3	33 7	32 11

BANKRUPTS.

An Analysis of Bankruptcies in England and Wales, shewing the Counties and the Trades in which the same occurred, during each month, from January to April, 1838.—(To be continued.)

COUNTIES.	1838				TRADES.	1838			
	January.	February.	March.	April.		January.	February.	March.	April.
Bedford . . .	..	..	..	..	<i>Persons connected with</i>				
Berks . . .	3	..	1	2	<i>Manufactures.</i>				
Buckingham . . .	..	..	..	..	Cotton Trade . . .	1	..	2	4
Cambridge . . .	..	1	..	..	Woollen do. . .	2	..	1	1
Chester . . .	1	1	1	3	Silk do. . .	1	..	..	..
Cornwall . . .	1	..	3	1	Linen do. . .	..	..	1	1
Cumberland . . .	..	..	3	..	Iron do. . .	2	5	3	1
Derby . . .	..	3	1	2	Building do. . .	2	6	3	6
Devon . . .	..	3	1	1	Miscellaneous . . .	9	7	7	5
Dorset . . .	1	2	..	1					
Durham . . .	..	1	..	2	<i>Agriculture.</i>				
Essex . . .	1	1	2	1	Farmers . . .	1	..	..	1
Gloucester . . .	7	5	4	1	Corn and Hop } Dealers . . .	6	5	3	2
Hereford . . .	..	1	1	1	Cattle and Wool } Dealers . . .	2	1	2	3
Hertford . . .	2	1	1	..	Coaches & Horses .	1	2	3	..
Huntingdon . . .	..	..	..	..	Brewers, Maltsters and Distillers . }	3	5	3	3
Kent . . .	3	3	4	4					
Lancaster . . .	6	8	8	11	<i>Other.</i>				
Leicester . . .	1	2	2	..	Innkeepers and } Victuallers . . .	6	5	8	8
Lincoln . . .	..	..	2	4	Merchants, Ware- housemen, Agents, Brokers, and Wholesale Dealers . . .	13	14	19	14
Middlesex . . .	21	12	16	9	Tradesmen, Shop- keepers, and Re- tail Dealers . . .	29	23	19	17
Monmouth . . .	..	3	1	..	Miscellaneous . . .	3	10	7	4
Norfolk . . .	..	3	3	..					
Northampton . . .	2	1	1	..					
Northumberland . . .	..	1	1	..					
Nottingham . . .	..	1	..	2					
Oxford . . .	3	..	1	..					
Rutland . . .	..	..	..	..	
Salop . . .	1	..	..	..		
Somerset . . .	..	2	..	1					
Southampton . . .	1	2	1	2					
Stafford . . .	2	3	..	2					
Suffolk . . .	..	..	2	..					
Surrey . . .	2	1	1	1					
Sussex . . .	3	3	1	1					
Warwick . . .	6	7	5	8					
Westmoreland . . .	..	..	..	..	
Wilts . . .	..	1	..	1					
Worcester . . .	2	3	1	1					
Yorkshire . . .	12	8	10	8					
Wales . . .	..	5	3	..					
Total . . .	81	88	81	70	Total . . .	81	88	81	70

JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

JULY, 1838.

On the Sickness and Mortality among the Troops in the West Indies.
Prepared from Official Documents, by CAPT. A. M. TULLOCH, F.S.S.,
&c. &c. Part I., embracing the Windward and Leeward Command.—
(*To be continued.*)

[*Read before the Statistical Society of London, on the 18th of June, 1838.*]

THE following pages have been framed for the purpose of exhibiting to this Society an Abstract of a Report on the Sickness and Mortality among the Troops in the West Indies, prepared by Mr. Henry Marshall, Deputy Inspector General of Hospitals, and myself, for the information of the Secretary-at-War, by whom it has recently been submitted to Parliament. Those who are anxious to enter into particulars I must refer to the Report itself. This is intended merely as a specimen of the important statistical facts to be deduced from military returns, and the advantages likely to result, both to military and medical science, from the information collected by the medical officers of the British army, in regard to the diseases incident to all the colonies being thus organized and made public.

The troops employed in garrisoning the British Possessions in the West Indies form several Military Commands, of which it is proposed to investigate the statistical details, in the following order:—

- I. The Windward and Leeward Command,
- II. The Jamaica Command,
- III. The Bahamas, and
- IV. The Honduras Command.

I.—THE WINDWARD AND LEEWARD COMMAND.

The troops in this military command are employed in garrisoning various islands and possessions, extending from 6° to 17° north latitude, and 56° to 63° west longitude, and including that portion of the American continent termed British Guiana, with the islands of Trinidad, Tobago, Grenada, St. Vincent's, Barbadoes, St. Lucia, Dominica, Antigua with Montserrat, and St. Kitt's with Nevis and Tortola.

These islands form a portion of that chain which stretches across the great gulf separating North from South America; but many of them differ so materially in physical aspect, local peculiarities, and other circumstances by which the health of troops are likely to be affected, that it would be vain to attempt any description sufficiently comprehensive to be applicable to the whole. Trinidad, Tobago, St. Lucia, and Dominica, for instance, are extremely mountainous, covered with dense forests, and intersected by deep and narrow ravines, impervious to the breeze,

and in which the rain water, finding no vent, stagnates among a mass of decayed vegetation, creating a moist soil, with a damp climate and a variable temperature; whereas Antigua and Barbadoes are comparatively low, barren, and rocky, with a scanty soil, but little exuberant vegetation, a dry climate, and equable temperature. The other islands possess a kind of intermediate character in these respects; while the coast of British Guiana is totally different from either, being an immense tract of level country, covered with forest, elevated only a few feet above the level of the sea, and, during the rainy season, presenting an almost endless succession of swamps and marshes, with an atmosphere exceedingly humid, though not so variable in temperature as some of the islands first referred to.

The mean height of the thermometer throughout the year is rather under than above the average of similar latitudes, being only about $80\frac{1}{2}^{\circ}$. In none of the islands is it above 82° or under 79° , and any slight difference in this respect results more from their geological features, or extent of cultivation, than the mere difference of latitude; as the mean temperature of British Guiana, in latitude 6° , is but $80\frac{1}{2}^{\circ}$, while that of St. Kitt's, more than 12 degrees further to the north, is 81° .

The next peculiarity which extends to this, as well as to most tropical regions, particularly of insular situation, is great uniformity of temperature. The difference between the highest and lowest mean range of the thermometer is, even in the most variable of the islands, only 13° , and in some it is not more than 4° throughout the year; whereas in Britain it is, in most years, upwards of 30° . The heat is generally modified by the trade-wind, which, except from August to December, blows with great regularity from the east and its collateral points. In some of the larger islands there is generally also a land-wind during the night.

In this, as well as other tropical climates, there is but little change in the elasticity or pressure of the atmosphere. The extreme range of the barometer is not more than from a quarter to half an inch throughout the year, and it is not materially affected even by hurricanes; whereas in this country its range is from two to three inches, and it varies with every slight change of weather.

One of the most marked of the atmospherical peculiarities of these regions is the large quantity of rain which falls annually, being, on the average, at least three times as much as in Britain—a necessary consequence of rapid evaporation under a tropical sun. The quantity, however, varies materially in the different colonies, according as their surface is mountainous or level, clothed in wood, or cleared and under cultivation. The Report contains a statement of the fall of rain in each colony, so far as it has been ascertained by measurement; the average quantity throughout the whole command has been estimated at from 60 to 70 inches annually.

The rain of these regions is, however, of a very different character from that of Britain, being confined principally to two seasons of the year, termed the spring and autumnal rains, and then falling, not in gentle showers, but in torrents, which, unless in a very dry soil, or where there is free drainage, speedily inundate the surrounding country.

The four seasons of temperate climates are therefore represented by

two wet and two dry seasons; but as the rains follow the course of the sun, it is obvious that the period of their commencement and duration must vary according to the proximity of the settlements to the equator. In Guiana, the most southerly, the spring rains generally extend from December to January, the autumnal from May to August, while in the most northerly of these settlements, the former does not commence till April or May, and the latter extends from October to December.

In many of the islands, particularly the less hilly ones, there is scarcely any deposition of dew, and in others it is generally scanty, except in densely-wooded districts.

In this command two classes of troops are employed, white troops, consisting of the service-companies of different regiments of the line, and black troops, composed of negroes, who are formed into colonial corps. The detail of these will be considered separately.

1. *White Troops*.—The number of white troops employed in this command during the last 20 years, from 1817 to 1836, has varied from 3264 to 5462, the average being 4333: of this force there died in 20 years 7069, being about 85 per 1000 of the strength annually, or nearly six times as many as among the same class of troops in Great Britain, where the mortality is 15 per 1000 annually.

Of this number, however, only 6803 deaths can be accurately traced as having taken place from disease, the remainder were men who died on shipboard or from accidental causes, and who did not come under medical treatment.

Years.	Out of every 1000 White Troops in the undermentioned Colonies the following proportions have died in each year from 1817 to 1836 inclusive.										Average of whole Command.
	British Guiana.	Trinidad.	Tobago.	Grenada.	St. Vincent's.	Barbadoes.	St. Lucia.	Dominica.	Antigua, &c.	St. Kitt's, &c.	
1817	64	257	235	190	148	123	87	559	54	70	162
1818	27	398	176	105	96	77	206	209	35	170	126
1819	73	152	222	68	33	59	92	67	30	9	83
1820	160	30	814	51	36	102	81	63	25	74	105
1821	217	23	270	75	55	121	123	396	49	106	109
1822	77	66	88	45	63	58	394	99	32	15	77
1823	60	60	25	24	71	23	123	76	50	51	49
1824	117	68	54	19	66	49	229	57	20	60	70
1825	94	108	87	57	77	49	93	110	32	126	76
1826	95	92	135	48	55	44	75	133	26	31	68
1827	144	79	67	30	91	34	272	68	54	17	85
1828	134	167	94	135	44	37	60	43	67	39	81
1829	59	21	116	69	36	49	88	97	53	63	58
1830	82	41	148	15	25	49	142	94	30	52	65
1831	110	62	135	21	27	66	74	68	36	25	69
1832	34	73	67	34	50	94	56	91	24	45	64
1833	55	49	75	19	23	36	108	132	43	80	50
1834	53	42	39	27	19	25	73	110	38	44	43
1835	60	62	34	54	26	32	93	141	78	83	57
1836	35	67	269	85	40	53	197	69	37	172	77
Average .	84	106.3	152.8	61.8	54.9	58.5	122.8	137.4	40.6	71.	78.5

As the force is very unequally distributed throughout these colonies, it would be useless, without reference to the strength, to state the number of deaths which took place in each; but the preceding table exhibits the proportion of the strength which died there in every year from 1817 to 1836, inclusive.

This table shews how exceedingly variable is the mortality. In Tobago, for instance, we find that in one year (1820) 4-5ths of the whole force were cut off, and, in several other years, more than 1-4th part have died; yet, in 1825, the mortality was but 25 per 1000. This table also shews how differently the climate of different islands affects the health of the troops. In Tobago, Dominica, and St. Lucia, for instance, the mortality has been from 122 to 152 per 1000, while, in Antigua and Barbadoes it has been only from 40 to 58 per 1000 annually.

Each of these islands, too, seems to affect the health of the troops differently, as regards the diseases from which they suffer. This will be seen by the following table, shewing the annual ratio per 1000 of the strength who died in each colony by the following diseases:—

	Annual Ratio of Mortality per 1000 of White Troops serving at each of the following Colonies.										Average of whole Command.
	British Guiana.	Trinidad.	Tobago.	Grenada.	St. Vincent's.	Barbadoes.	St. Lucia.	Dominica.	Antigua, &c.	St. Kitt's, &c.	
By Fevers	59.2	61.6	104.1	36.3	11.2	11.8	63.1	49.3	14.9	42.1	36.9
Eruptive Fevers . . . .	..	..	..	..	..	..	..	..	..	..	..
Diseases of Lungs. . . .	6.4	11.5	11.	6.6	10.5	15.8	12.5	8.3	9.	9.5	10.4
" Liver	1.	1.1	2.	4.5	1.6	1.4	1.	1.7	2.8	2.2	1.8
" Stomach and } Bowels	8.9	17.9	24.	16.1	24.2	20.8	39.3	70.3	9.2	10.3	20.7
" Brain	4.4	4.7	5.	4.6	2.8	3.3	4.3	5.3	1.9	2.8	3.7
Dropsies	1.2	7.7	3.5	1.6	1.6	2.4	2.	7.	1.4	9.	2.1
All other Diseases. . . .	2.9	1.8	3.2	2.9	2.7	3.0	.6	1.8	1.4	3.2	9.
Total	84.	106.3	152.8	61.8	54.9	58.5	122.8	137.4	40.6	71.	3.5

This shews at a glance the diseases most inimical to the troops in each of these colonies; and it will be observed how marked a difference there is in the effect produced by their climates on the constitution. Tobago is most remarkable for fever; Dominica, for diseases of the bowels and of the brain; Barbadoes, for those of the lungs; Grenada, for those of the liver; while Trinidad is most noted for its dropsies. Each seems in a greater or less degree subject to the operation of some agency highly prejudicial to European life, and which cannot readily be accounted for, either by any perceptible atmospherical agency, local peculiarities, or the nature of the position occupied by the troops, as may be seen by the following brief sketch of each of these colonies.

British Guiana.—Lat. 6° 10' to 8° N. Long. 56° to 60° W. British Guiana comprehends the settlements on the Rivers Essequibo, Demerara, and Berbice, with their dependencies, extending about 200 miles from east to west along the shores of the South American continent, and from 200 to 300 miles into the interior.

The soil of the whole of this coast is of a deep alluvial nature, and of

comparatively recent formation, the immense quantities of deposit annually brought down by the numerous rivers intersecting that portion of the continent having so rapidly gained upon the ocean that, in many parts, its waters have receded three or four miles within the last century.

Owing to this peculiarity in its formation, the country to the distance of many miles from the coast is a vast flat, with no other elevation than what may have been produced by an occasional sand-reef, and, except in the few spots where cultivation has extended, it is covered either with a dense forest of trees, or with rank grass of a gigantic height.

In most parts, the land nearest the sea being somewhat higher than at a short distance inland, water readily accumulates during the rainy season, so as occasionally to inundate a large extent of country; and the forest being in many places too dense to admit of its evaporation, there is always in such situations an accumulation of what is termed bush water, containing great quantities of vegetable matter, and giving rise to noxious exhalations.

The climate throughout the whole of British Guiana is principally distinguished for its extreme moisture: as an instance, no less than 157 inches of rain fell in George Town, Demerara, in the year 1831, being nearly six times the quantity which falls annually in Great Britain; and in 1830 it rained almost continuously throughout the whole year.

Yet, with all these supposed sources of malaria, the mortality has not averaged above 84 per 1000, being nearly the mean of what prevails among the troops throughout the command. Though yellow fever has frequently prevailed there, it has not proved so generally fatal as at some of the other islands enjoying what might be supposed greater advantages in point of situation.

The troops are all quartered in low marshy situations; in fact, there are none other in the colony.

Trinidad.—This island lies adjacent to the South American continent, from which its nearest point is separated by a narrow strait of about 12 miles. It is upwards of 70 miles long, by 50 broad, and in physical aspect presents a striking contrast to the low lands of Guiana, last described. On the northern extremity a bold range of mountains rises to the height of 3000 feet, broken into the most rugged and abrupt forms, and clothed to the summit with forest trees. Towards the south extends a chain of hills, of less elevation, and of a more pastoral character, while the centre of the island is occupied by a group of flat or round-topped hills, dividing it, as it were, into two extensive valleys, which are occasionally intersected by a succession of hill and dale. The whole island is well watered by numerous streams in every direction.

The greater part of the interior is uncultivated, the low grounds forming a succession of marshy plains, and the elevated spots being, for the most part, covered with dense vegetation of forest and underwood. Many parts are understood to be, as yet, unexplored, owing to their unhealthy character and the natural difficulties which the country presents to such an undertaking.

In an island so extensive, mountainous, and covered with forest, it may be supposed that the atmosphere is generally overloaded with moisture. It does not appear, however, that the quantity of rain which falls is so great as in Guiana, the average being about 65 inches

annually, and this is said to be diminishing very materially with the progress of cultivation. In 1830 rain fell on 211 days.

The nights in this island are generally cool and pleasant, but the temperature during the day is much the same as at the other stations in the command.

Here the mortality has averaged 106 per 1000; but it is worthy of remark, that a great portion of it occurred from 1817 to 1820; since then various improvements in the positions of the troops have taken place, and the mortality has been reduced to the average of the other stations in the command.

Tobago.—This island lies close to Trinidad, from which its western extremity is distant only 6 miles. It is 32 miles in length, and 12 in breadth; on the north extremely rugged and mountainous, and from the sea appears like a mass of dark abrupt precipices. Towards the south and west the ground descends into a succession of conical hills and ridges of no great elevation, which, as they approach the sea, terminate in broken plains and low lands. The eastern district is also of a mountainous character. The soil in the valleys is generally a rich dark mould, and is well watered by numerous streams and rivulets. Cultivation being for the most part confined to a portion of the low lands near the sea on the south side of the island, the greater part of the interior is still in a state of nature, the high grounds covered with forests, the deep ravines choked up with vegetation, and the bottoms of the valleys, being very narrow and not possessing free drainage, generally of a wet marshy character.

The climate and seasons here are much the same as at Trinidad, only rather more humid; but we possess no measurement of the quantity of rain which falls annually. In some of the low grounds, excluded from the influence of the breeze, the heat is described as exceedingly oppressive, particularly at Scarborough, the capital, which lies at the foot of a hill on the south side of the island.

The troops, however, enjoy the advantage of a more moderate temperature, being quartered in Fort King George, on the summit of the hill above Scarborough, where the heat is modified by a constant breeze, and does not exceed the usual average in this command.

This is an extremely unhealthy island as the results will testify; nearly 153 per 1000 of the strength having perished annually during the last 20 years. This was not always the case, for during the 10 years prior to 1817, the mortality only averaged 50 per 1000, and invalids were often sent there from other islands for the benefit of their health. It is impossible to say to what causes so marked a deterioration of climate is to be ascribed.

We have stated that in one year 4-5ths of the force were cut off: the particulars of this extraordinary mortality are as follows:—

Several cases of fever, of a malignant type, occurred among the York Rangers employed in this island, during the year 1818 and part of 1819. On the 10th of April in the latter year, they were relieved by two companies of the 4th Regiment. This detachment remained tolerably healthy till about the middle of February, 1820, when an extremely fatal yellow fever broke out, and attacked all classes indiscriminately, as will be seen by the following return of the deaths from the 10th of

April, 1819, when the detachment landed in the island, till the 10th of September, 1820, when it embarked for Barbadoes :—

	Strength.	Treated for Fever.	Died by Fever.	Recovered from Fever.	Escaped Fever entirely.
Commissioned Officers . . .	6	5	5	..	1
Non-Commissioned Officers and Privates }	123	116	84	32	7
Women	11	11	8	3	..
Children	6	6	3	3	..
Total	146	138	100	38	8

This mortality occurred chiefly between the middle of February and the 8th of July. Of the 109 deaths which occurred in 1820, 107 were from fever alone.

An epidemic of a similar character, though not quite so fatal, occurred in 1801, when upwards of half the white troops in garrison were cut off; and when it proved so virulent, particularly among the white inhabitants of the town, that, of 63 persons attacked, only 2 recovered.

This disease seems to have made its appearance, and raged with equal violence, at all seasons of the year. In 1818 it was particularly fatal in December, and continued so during January and February of the following year. In 1820 it began in February, and raged till July; then re-appeared in November, and continued till February, 1821. In 1830 it broke out in July, and was most fatal in October. There seems thus to have been no uniformity in the periods at which sickness and mortality were most prevalent at this station.

Grenada.—This island is about 25 miles in length, and 12 in breadth, and lies about 60 miles north-west from Tobago. It is traversed throughout its whole length from north to south by an irregular range of mountains, rising to the height of more than 3000 feet, from which others of less elevation branch off in a lateral direction, forming a succession of rich extensive valleys, which, as they approach the sea, particularly on the south-east or windward side of the island, open into level alluvial plains. On this side there is also a considerable extent of low swampy ground, where, in the autumnal season, fevers of a very severe type are of frequent occurrence; but there are no troops quartered in that neighbourhood.

Though Grenada is mountainous, yet it is neither overgrown with dense vegetation, nor are its high lands of the same abrupt inaccessible nature as those of Tobago. The valleys are open, and most parts of the island admit of free cultivation; indeed, so far back as 1776, 2-3rds of it were under crop. The soil consists, principally, of a rich black, or reddish, mould, which is well watered in every direction by numerous small streams from the mountains; and in the centre of the island are several hill-lakes of considerable magnitude.

The fall of rain is very considerable, amounting to about 65 inches annually. The mean temperature is rather higher than in the other islands.

The troops are principally quartered on Richmond Heights, 700 feet

above the town. The mortality has been comparatively low, being under 62 per 1000 annually. Fever has been remarkably rare, particularly of late years. This, however, was not always the case, for in 1794 yellow fever raged with dreadful violence. Every house was the abode of death; men long resident found no security; young and old, temperate and intemperate, were alike affected by it. Thus, though the extent of cultivation, or other physical peculiarities of Grenada, may tend to render this disease of less frequent occurrence than in the colonies we have just described, there are periods in which these supposed sources of salubrity prove of no avail in procuring immunity from its ravages.

It is an extraordinary feature in the diseases of this island that those of the liver should prove such a source of mortality among the white troops; the deaths from that class being nearly thrice as high as at the other stations in the command. We are unable to trace any cause to which this peculiarity can be attributed.

St. Vincent's.—This island is 18 miles long, and 11 broad, and lies about 70 miles to the north-east of Grenada. Its centre is occupied by a lofty range of mountains, which in some parts attain the height of 4000 feet, but rapidly decline towards the sea, leaving a considerable extent of low lands on either side, somewhat uneven in surface, but affording rich crops. The island is of volcanic origin; from one of its mountains (the Souffrière) there have been frequent eruptions—that of 1812 caused great devastation. At the base of this mountain is an extensive plain of nearly 6000 acres of most productive land; and to the north, in the Carib country, there is also a considerable extent of level and fertile ground.

The mountains are clothed from the base to the summit with immense forest trees; but the ground having everywhere the advantage of a gradual slope, and there being little jungle or brushwood, ventilation is not impeded. The valleys also are sufficiently wide and free from excessive vegetation to give a healthy character even to the uncultivated portion of the island; and there is little swampy ground, except in some spots near the sea, where the action of the waves has thrown up a barrier, which obstructs some of the small streams during heavy rains, and causes them for a time to overflow their banks.

In the valleys the soil chiefly consists of a rich black mould, or a mixture of clay and sand: in the high grounds it is of a light sandy character. The whole island is well watered by numerous rivulets; but only about 1-3rd of its surface is under cultivation.

Owing to the height of the mountains, and their being shrouded in wood which attracts the clouds, the atmosphere of this island is generally humid, and rain is common during most of the year. In 1832, for instance, it fell on 298 days, and in 1822 on 261 days; the average quantity throughout the year is from 70 to 80 inches, and even considerably more on the high grounds; the dews are also very heavy. The temperature is about the average of what prevails at the other islands in the command; but from July to October it is rather more variable.

This island has enjoyed a considerable exemption from the general mortality, except in 1817, when it was attributable to the accidental

circumstance of a corps being sent there in very bad health from another island. The average, even including that year, has been under 55 per 1000 annually. The troops are principally quartered in a fort 600 feet above the level of the sea.

Barbadoes.—This island lies about 60 miles to the east of St. Vincent's, and extends 22 miles in length, by 14 in breadth. When viewed from the sea it appears arid and rocky, exhibiting little of that exuberant vegetation which characterises most of the other islands in this command. The north, south, and western districts consist principally of low land, rising by a succession of terraces towards the north-east and south-east, where there is a considerable extent of high ground, formed by a number of steep and conical hills, with deep intervening valleys: the greatest elevation in the island, however, does not exceed 1100 feet. Most of these hills are naked and barren; but others, particularly towards the interior, are richly clothed with verdure, and present a striking contrast to the flat uninteresting features of other parts of the island. The soil is in general very scanty in the upland districts. In the lowlands it is mostly calcareous, extremely light and absorbent, soon dry after the heaviest rains, and all under cultivation. There is only one marshy spot of any extent in the island; it lies about 3 miles to windward of the garrison, close to the sea, and is generally overflowed by the tide, but it does not appear to exercise any prejudicial influence on the health of the troops.

The climate of Barbadoes is much the same as that of St. Vincent's, except that the quantity of rain is considerably less—the average amounting only to 58 inches annually. There is very little dew, and seldom any humidity of atmosphere. Owing to the flatness of the island, and it being open in almost every part to the sea-breeze, the heat is in general less felt, though the thermometer ranges fully as high as in any of the other islands. The troops are principally quartered on an eminence overlooking the capital, where they have a constant breeze and diminished temperature.

The troops in this island have enjoyed a very considerable exemption from the general mortality, the deaths having averaged only $58\frac{1}{2}$ per 1000 of the strength.

Diseases of the bowels constitute more than a third part of the whole deaths, and seem not to be diminishing of late years, either in frequency or severity. They proved most fatal in 1817, when dysentery was extremely prevalent, particularly in the 2d, or Queen's Regiment; so much so that about the middle of the year nearly half of that corps were in hospital from it. Various means were adopted to protect them against the influence of this disease, but without effect.

The low ratio of mortality by fever is one of the most striking features in the diseases of the white troops at Barbadoes; it scarcely amounts to a third part of the general average throughout the command; and since 1822 the deaths from this cause have not exceeded $4\frac{1}{2}$ per 1000 of the strength annually, being less than in the Mediterranean. No such exemption, however, is manifest prior to that period; for in 1817 it cut off nearly 4 per cent. of the force, and in 1820 appeared in an epidemic form about the end of October, increased in severity during November and December, and terminated in the end of January. In 1821 it

re-appeared almost exactly at the same period, attained its height in November, and ceased in the middle of January, though a few cases occasionally occurred till March. The disease in both these years was of the very worst type, and fatal to a large proportion of those attacked, though it did not spread very generally among the troops. It affected equally the temperate and intemperate, and among the officers was even more virulent in its character than among the privates. Of 8 officers attacked, in 1821, 6 died, and in the 4th Regiment, out of 5, not one recovered.

On both these occasions the weather was more than usually cool and pleasant, and but little rain fell. No atmospherical changes seemed to produce the slightest influence on the disease.

St. Lucia.—This island extends nearly 32 miles in length and 12 in breadth, and lies about 40 miles to the north of St. Vincent's. It comprises two districts, differing in physical aspect, but each in an eminent degree subject to the operation of those agencies which are supposed to exert a baneful influence on the health of Europeans in tropical climates. Basseterre, the lowest and best cultivated portion of the island, abounds in swamps and marshes. Capisterre, the more elevated part, consists of a succession of abrupt mountains of the most picturesque and fantastic shapes, covered to the summit with forest trees and dense underwood, and intersected by numerous ravines, which, being too narrow to admit of free ventilation, are at all times replete with moisture, and choked up with decayed vegetation in every stage of decomposition.

The climate is principally characterised by its extreme moisture and variableness. We possess no specific measurement of the quantity of rain which falls annually, but it is stated to be sometimes very great; indeed, during several months, but particularly in October and November, it is incessant, and showers are frequent for at least nine months in the year. The quantity which falls is, however, variable, and in some years even scanty. Cool dry weather generally sets in about Christmas, and continues for three or four months, at which time the climate is exceedingly pleasant. During the rest of the year the weather is sometimes dry and sultry, at others cold and damp, exhibiting a difference of from 10 to 12 degrees of temperature in the course of a few hours. The troops are principally quartered on a height 850 feet above the level of the sea.

This island has been remarkably fatal to the troops. The mortality has averaged 123 per 1000 annually; and on several occasions during the last 20 years from one-third to one-fourth of the troops have been cut off.

St. Lucia has always been noted for the extreme insalubrity of its climate to white troops, particularly as manifested in fevers and diseases of the bowels; for we find it stated by Sir Gilbert Blane*, that out of a mean force of 1630, comprising the garrison in 1780-1, no less than 1639 were cut off, being more than the average strength in one year, the greater part of whom fell victims to these diseases. Though we have not had to record any such extraordinary instance of mortality during the period which has come under our investigation, still there seems very little amelioration in the climate during the last 20 years.

* *Medico-Chirurgica Transactions*, vol. iii.

Whatever the causes of disease may be, they continue in active operation.

Opposite to St. Lucia is a small island called Pigeon Island, which was formerly esteemed more healthy than St. Lucia, and used as a convalescent post; but in 1836, out of 55 stationed there, 25 died—22 from dysentery and 3 from fever.

Dominica.—This island is about 29 miles in length and 16 in breadth, and lies nearly midway between the French settlements of Martinique and Guadeloupe. It is upwards of 100 miles to the north of St. Lucia, which it very much resembles in physical aspect, the interior being composed of a bold range of rugged mountains rising to the height of more than 5000 feet, and intersected by deep ravines, which occasionally open out into narrow valleys; the whole clothed with a dense vegetation of forest-trees and shrubs, except in the few spots which have been brought under cultivation.

Dominica is apparently of volcanic origin; the soil in the interior is generally a light brown mould, but towards the sea-coast, and in the openings of the valleys, it is a deep black earth well adapted for cultivation. The island is watered throughout its whole extent by 30 rivers of considerable magnitude, and numerous rivulets. The combination of wood, water, and mountain scenery, which almost every part of it presents, however pleasing to the eye, seems to favour the development of diseases most inimical to the constitutions of Europeans.

The climate differs but little from that of St. Lucia, except that the rainy season is later in its commencement and termination.

The troops are principally quartered on the summit of a rock 450 feet high, where the temperature is considerably under the mean of the whole command, yet the mortality is higher than at any of the other stations. It has averaged during the last 20 years 135 per 1000 of the strength, and in 1817 more than half the garrison was cut off. In that year 216 cases of fever were admitted into hospital, of whom 74 died, or 1 in 3; of acute dysentery, 160 cases, of whom 42 died, or 1 in 4; and of chronic dysentery, 179 cases, whereof 41 died, being nearly in the same proportion. The meteorological phenomena evinced nothing remarkable during that period, to which the sufferings of the troops could in any respect be attributed.

In 1821 the fever appeared in September, and continued to rage with great violence during the two following months; in the course of which almost every white soldier on the island was attacked, and a third of the force perished. The weather at this period is described as hot and sultry, but there was no other peculiarity worthy of notice.

Antigua and Montserrat.—The island of Antigua lies about 90 miles N. N. W. of Dominica, and is of an oval shape, 20 miles in length and 54 in circumference. It possesses little of that mountainous character which we have remarked in most of the islands previously described, the greatest elevation being 1210 feet; and on approaching it from the sea, instead of mountains covered with rich foliage and vegetation, nothing is visible but a barren rugged coast, almost destitute of verdure. The high grounds are principally on the south and south-west side of the island, and consist of a succession of round-peaked hills partially covered with small trees and brushwood, and intersected by well-cultivated valleys. These hills sink rapidly

towards the north-east, on which side a large portion of the island is low, and in many parts swampy.

The soil in the high lands is a reddish clay on a substratum of marl, that in the low lands a rich dark mould on a substratum of clay. The soil is extremely dry, as, with the exception of a few small rivulets among the hills, the island is destitute of running water.

The climate of Antigua is principally remarkable for a want of moisture; indeed, the average fall of rain is not above 45 inches annually; a very small quantity, considering the rapid evaporation which takes place under a tropical sun. Even the dew is but scanty, and the island often suffers from severe droughts. The rainy season is very uncertain, but may be said to extend from June to the end of the year, though a considerable quantity falls also in the other months.

Owing to the general dryness of the atmosphere, the alternations of temperature are but slight, the thermometer seldom ranging more than 4 degrees in the 24 hours. The mean temperature is also rather under the average of the Windward and Leeward Command.

The island of Montserrat, which forms a dependency of Antigua, and where a portion of the troops is generally stationed, lies about 22 miles south-west of it, and is about 12 miles long and 7 broad. It consists of a range of steep abrupt mountains, or rather, perhaps, of one lofty mountain, 2500 feet high, of which the summit has been broken into a variety of precipices and deep chasms, but the base slopes off towards the sea by a succession of gentle ridges admitting of cultivation. With the exception of the town of Plymouth, which is unfavourably situated near the beach, having an amphitheatre of hills in its rear intercepting the sea-breeze, the island enjoys a high character for salubrity. The barracks of the troops at Antigua are elevated above 400 feet. The mortality there has been uniformly low as compared with the others, the average being only 40 per 1000. Fever has been by no means very prevalent of late years, but in 1816 it was extremely so.

St. Kitts, Nevis, and Tortola.—The island of St. Christopher's lies about 50 miles north-west of Antigua, and is of an irregular oblong form, measuring nearly 72 miles in circumference. A chain of barren rugged hills runs through the centre from north to south, in the midst of which stands Mount Misery, about 3711 feet high, and of volcanic origin. From the foot of these hills the ground slopes gradually to the sea, is all under cultivation, and exceedingly fertile. The soil in the low grounds is a dark grey loam, very light and porous, through which water percolates so quickly that it is quite dry within an hour after the heaviest rains. The island is not so well watered as most of the others we have described, there being only four streams in it of any magnitude.

The climate, like that of most mountainous regions within the tropics, is subject to great vicissitudes; the vapour drawn up during the day descending in the afternoon and evening, causes at these periods a considerable reduction of temperature, particularly from November to April. More rain falls than in the adjacent island of Antigua, especially during October, November, and December, but we possess no exact measurement of the quantity.

The principal barracks occupied by the troops in St. Kitt's are on Brimstone Hill, situated on the south-west side of the island, about 700 feet above the level of the sea. This hill is detached from all the

others, and is precipitous on every side except where a narrow winding road forms an approach to it from the beach. It is almost entirely composed of limestone mixed with chalk. The barracks are built on several little platforms on the hill. There are also detachments at Nevis and Tortola, two islands at some distance; but of which our limits will not admit of furnishing any particulars.

The general mortality of these three islands has been 7 per cent., of which 4 per cent. arise from fever. If our estimate of the climate of St. Kitt's was to be founded on this statement alone, we should suppose fever to be a greater source of mortality than in the other islands, whereas, till last year, it was for a long period remarkably exempt from it. The greater proportion of the deaths by fever in 1820, 1821, and 1825, occurred among the detachment at Nevis; and even last year 14 of the deaths from that disease occurred at Tortola. On this occasion, however, it extended to St. Kitt's, and raged with great violence among the troops at Brimstone Hill and Basseterre, commencing at the latter station, from which it gradually extended itself throughout the whole island, and ultimately cut off nearly an eighth of the white troops stationed there. This remarkable visitation was preceded by no perceptible change in the atmosphere, nor was there any alteration in the locality or condition of the troops to which it could be attributed. Nevis, where the disease generally prevails, was this year almost exempt from it.

This concludes our remarks on the relative mortality in these colonies. With regard to the extent of sickness by different diseases no separate estimate has been made for each colony. But, generally throughout the whole command, the number of white troops admitted into hospital in the course of 20 years, by each class of diseases, was as follows:—

	Admissions.		Deaths.	
	Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.	Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.
Fevers	62,163	717	3,195	36.9
Eruptive Fevers	13	$\frac{2}{10}$	1	..
Diseases of the Lungs	9,975	115	906	10.4
„ of the Liver	1,946	22	161	1.8
„ of the Stomach and Bowels	36,474	421	1,795	20.7
„ of the Brain	2,447	28	312	3.7
Dropsies	659	$\frac{7}{10}$	180	2.1
Rheumatic Affections	4,202	49	17	
Venereal „	3,043	35	6	
Abscesses and Ulcers	17,708	204	18	
Wounds and Injuries	11,149	129	60	
Punished	4,327	50	2	2.9
Diseases of the Eyes	7,686	89	4	
„ of the Skin	559	6	1	
All other Diseases	2,584	30	145	
Total	164,935	1,903	6,803	78.5

One of the principal features worthy of remark in this table is the great prevalence and fatal character of diseases of the lungs. Of the 9975 cases reported under this head there were from—

	Attacks.	Deaths.
Inflammation of Lungs	1,941	112
Pleurisy	34	1
Spitting of Blood	303	34
Consumption	1,023	580
Acute Catarrh	5,108	49
Chronic Catarrh.	1,409	127
Asthma	92	2
Difficulty of Breathing	63	1
Hooping Cough	2	0
	<hr/> 9,975	<hr/> 906

Though the proportion of admissions by this class of diseases is lower than among troops in the United Kingdom, in the proportion of 115 to 148, the ratio of mortality is much higher, as nearly $10\frac{1}{2}$ per 1000 of the strength have been cut off annually; whereas in Britain the deaths from the same class of diseases do not average, at the utmost, more than $8\frac{1}{2}$ per 1000. This arises from the greater prevalence of consumption; for out of an aggregate strength of 86,661, serving in the Windward and Leeward Command, not fewer than 1023 were attacked by that fatal disease, being 12 per 1000 annually, while out of an aggregate strength of 44,611 dragoon guards and dragoons serving in Great Britain, only 286 were attacked, being about $5\frac{1}{2}$ per 1000.

Not only is consumption productive of great mortality in this command, but inflammation of the lungs and chronic catarrh are nearly twice as prevalent and twice as fatal as among troops in Britain, thus shewing how little effect a mere increase of temperature has in modifying these diseases. The only disease of this class from which the troops in this command appear for some years to have enjoyed any exemption is acute catarrh; but there has been a remarkable increase in the cases since 1823 and 1824, and of late years at least four times as many have been attacked by it as previous to that period. Another remarkable feature is, the comparative exemption from venereal affections, only 85 per 1000 having been attacked by it annually of the troops serving in this command, while in Britain and other stations where it is common, 180 per 1000 are attacked annually.

This concludes the principal observations we have leisure to make in regard to the white troops in this command; the effect of the climate of Jamaica on those serving there will next be illustrated.

On the Relative Frequency of Pulmonary Consumption and Diseases of the Heart. BY JOHN CLENDINNING, M.D.

Wimpole Street, May 31, 1838.

SIR,

In delivering the Croonian Lectures for 1838, I have had occasion to lay before the Royal College of Physicians the results of experiments and observations I have made relative to the physical condition of the human heart under various circumstances of health and disease; and as

my enquiries were conducted, to a considerable extent, according to the method in use among statisticians, and exhibit some unexpected and important results, they come, at least partly, within the scope of the *Statistical Journal*. That portion of my observations to which I beg leave to direct your attention is the section on the statistics of disease of the heart, as compared with other diseases, and more especially with pulmonary consumption; of which the results tend to prove, in contradiction to the generally-received opinion, that diseases of the heart are more prevalent amongst adults than phthisis, and that in both sexes the former increase in frequency, as the latter decreases, with advance of years.

It is proper to premise a few words in explanation of my mode of proceeding. With a view to determine the, as yet, uncertain conditions of the healthy heart with respect to bulk and weight, absolute and specific, nearly 400 hearts of persons of both sexes and all ages above puberty were examined with care, then measured in water for bulk, and in the balance for weight, and subsequently classified according to age, sex, and disease. The result was that the healthy male heart averages for all ages above puberty about nine ounces avoirdupois in weight, and about half-an-ounce less in bulk, and that the dimensions of the female heart are nearly an ounce less; it was further ascertained that in specific weight the heart varies little, appearing rather to lose in density than gain, by age or disease. It appears, further, from observations made on nearly 200 subjects, that the relative weight of the heart above puberty and after death was to the whole person about 1-160th for the male, and 1-150th for the female: while with respect to the influence of age, it was proved that the heart rises in weight, both absolute and relative, from infancy to extreme age; the increase amounting in the male above puberty to between 6 and 7 per cent. in relative weight, and in the female to as much as 29 per cent.: the increase in absolute weight being striking in the males only: viz.—13 per cent.

In addition to these data for detecting vicious excess in the bulk and weight of the heart in the numerous cases in which the eye of the observer, unaided by instrumental tests, could not be trusted, I was provided with memoranda of the morbid appearances in nearly every case, and in many cases with notes taken during life. Having been thus careful to avail myself of every precaution that occurred to me as desirable, and that I found practicable, I shall not, I imagine, be considered presumptuous in offering to the numerous readers of the *Statistical Journal* the results at which I have arrived, however much those may seem to clash with popular opinions and the conclusions of writers of well-merited distinction and authority.

I am, Sir, &c.

To the Editor of the *Journal of the
Statistical Society of London.*

J. CLENDINNING.

STATISTICS OF DISEASE OF THE HEART.

The first topic that offers itself for observation is the relative frequency of *Morbus Cordis*, or disease of the heart, as compared with *Phthisis*, or pulmonary consumption, and other grave diseases, of a character sufficiently defined for numerical comparison.

The acts adduced in the following statement are drawn from the results of above 500 autopsies made within a limited period. Of these about half were cases included in the class *varia*, or diseases of various classes and kinds, exclusive of pulmonary consumption and disease of the heart. Of the remainder, between 70 and 80 above puberty were cases of consumption, of which two-thirds were males,—and the rest were cases of disease of the heart, of which likewise two thirds were adult males. The number, then, of cases in which the heart was more or less diseased, occurring in a total of 520 to 530 inspections, was 170 to 180, or about 33 per cent. ; and if we deduct from the total number of autopsies the cases of persons under puberty, or 15 years of age, amongst whom but two or three cases of diseased heart were observed, we shall then have, as the ratio of disease of the heart to the whole number, about 35 per cent. Unquestionably such a ratio is enormous, exceeding by far the calculation of those most disposed to estimate highly the mortality attributable to the heart; yet I have myself but little doubt that, with some explanation, the following table, which contains the facts relating to Phthisis and Disease of the Heart to which I refer, arranged according to age and sex, will be found less extravagant than it may, perhaps, at first appear:—

A Statement of the Number of Cases examined between the ages of 15 and 100, distinguishing the ratio which cases of Pulmonary Consumption (Phthisis) and Disease of the Heart (Morbus Cordis) bore to the whole number.

AGES.	MALES.						FEMALES.					
	Number of Cases.				Per-Centage Proportion of		Number of Cases.				Per-Centage Proportion of	
	Pulmonary Consumption.	Disease of the Heart.	Other.	Total.	Pulmonary Consumption.	Disease of the Heart.	Pulmonary Consumption.	Disease of the Heart.	Other.	Total.	Pulmonary Consumption.	Disease of the Heart.
15 to 30	11	5	8	24	45.	21.	8	5	20	33	24.	15.
30 „ 50	19	24	24	67	28.	36.	8	8	31	47	17.	17.
50 „ 70	17	34	33	84	20.	40.5	9	16	30	55	16.4	29.
70 „ 100	3	13	16	31	10.	42.	2	13	24	39	5.	33.3
Total.	50	76	80	206	24.2	36.9	27	42	105	174	15.5	24.1

The principal explanatory remark I think it necessary to offer is this : My principal field of observation receives all poor applicants from a certain district, provided only their complaints are severe, making no distinction as to sex, age, or disease, except small-pox, nor between curable and incurable cases ; and, in general, entertaining all the latter until the end of life, unless the sufferers voluntarily withdraw. The effect of this system of admission is that, compared with other asylums of sickness, the parochial infirmary, so governed, has, according to well-known laws of mortality, an annual loss of life much exceeding that of county infirmaries and city hospitals—a mortality, it is to be remembered, that is augmented very considerably by accessions of cases dismissed from other charities as incurable. For the effect of this comparatively indiscriminate admission and unlimited retention of patients, of course a large

allowance must be made. What the exact amount of that allowance should be I am not prepared to say; but if it be assumed at the immense proportion of 50 per cent. of the fatal adult cases, which, I am quite sure, is much over the mark, we shall still have a ratio of heart disease for which perhaps few persons will be prepared.

The extravagance of the ratio will probably appear still greater when we compare the amount of cases of phthisis with that of morbus cordis. Phthisis, or chronic pulmonary disease, is, and has long been held by pathologists and medical statisticians, to be by far the more frequent of the fatal diseases of these and all other temperate climes. The accomplished Dr. Young, writing in 1815, attributed to phthisis, as Heberden, Woolcombe, Wells, &c. had previously done, full 25 per cent. of the whole mortality of England. He begins his remarkable work on Consumptive Diseases thus:—"Consumption is, in almost all civilized countries, the most extensively and inevitably fatal of diseases;" and elsewhere (page 41) he says, "the frequency of consumption in Great Britain is usually such that it carries off about 1-4th of its inhabitants; at Paris the mortality of consumption has been estimated at 1-5th, and at Vienna it is said to be 1-6th, of the whole. But the mortalities at Paris and in the South of France, from consumption, have frequently amounted to 1-4th of the whole." Seven years previously to the publication of Dr. Young's work, Dr. Woolcombe, of Plymouth, calculated that the annual mortality in England, from consumption alone, amounted at that time to 55,000 persons (Remarks, &c., page 73); and Sir James Clark's estimate is apparently higher than Dr. Young's, being, for the 121 years ending with 1821, as follows:—

For the Year 1700	{The Deaths from Consumption were}		145
	to all the Deaths of the Year . . .		
1700 to 1750	„	„	•214
1750 „ 1801	„	„	•263
1801 „ 1811	„	„	•288
1811 „ 1821	„	„	•316

General average for the 121 Years . . . •245 or 1 in 4

And he adds, "It now appears (1835) to constitute 1-3d of the whole mortality."

The difference between my own conclusions and those of the distinguished authors just referred to—conclusions in which they are supported by the principal recent writers on the subject, as Benoiston, de Chateauneuf, Lombard, &c.—will seem the more wide and irreconcilable, for this reason: Drs. Woolcombe and Young, as is well-known, wrote at a time when the name of phthisis, or pulmonary consumption, was extended to other pulmonary affections besides that to which it has been limited by Sir J. Clark, Dr. Lombard, and others, who have written upon the subject, since the appearance of Laennec's great work; so that, if before 1819 tubercular consumption was the cause of but part of the 20 per cent. of popular mortality attributed, justly enough, to chronic pectoral, and mostly pulmonary disorders, then on that supposition the proportion of deaths referable to pulmonary consumptions in the old and looser sense is now much increased, since the present mortality from true phthisis, in the stricter sense of Laennec, is held by the high

authorities above-named to amount to 1 in 5, or thereabout; being the same per-centage of mortality as was previously attributed to several chronic pectoral affections, of which true phthisis constituted but one, though no doubt the principal, species.

Now the doctrine maintained by Young is true, although for practical purposes, perhaps, obsolete. In addition to the facts advanced by that very learned writer, in support of his opinion, others concur in the same conclusion—amongst the rest this unpublished observation of my own. Between May 1821 and May 1835 there have been recorded in the Journals of the Mary-le-bone Infirmary, under 18 principal heads of disease, 3753 deaths, exclusive of about 640 deaths from minor causes. Of the total, amounting to nearly 4400 deaths, 991 (viz. 542 males, and 449 females) were deaths from phthisis, (and mostly in the larger sense of the word, as used by Dr. Young,) which gives a per-centage of 22½ on the whole mortality of the 14 years. This observation fully bears out Dr. Young's estimate, as well as those of Drs. Wells, Woolcombe, and Heberden, and other English estimates anterior to 1819. But the limitation of the term phthisis, or pthisis, by Laennec, to tubercular phthisis, on account of its greater fatality, and more extensive distribution as compared with other chronic and strictly pulmonary diseases, while it has narrowed the field and rendered more precise the objects, has at the same time made more difficult the means of enquiry. And at the present time it is difficult to place confidence in any results not obtained by diagnosticians of unusual skill during life, or by careful *post-mortem* examinations by practised pathologists: so that, admitting the general correctness of Woolcombe, Young, &c., I am much less disposed to coincide in the views of the medical statist who have written subsequently to the general promulgation of the discoveries of Avenbrugger and Laennec in the great work of the latter. There is, in truth, much reason, and with the highest respect for the very able and distinguished writers above-named I say it, to suspect the data on which their calculations are founded. How small a proportion, in fact, of the mortality included in those estimates has arisen from disorders proved strictly phthisical, or even pulmonary, by competent diagnosticians during life, or by proper inspection *post-mortem*. For my part, I have no doubt at all that the greater part of the so-called pulmonary consumptions in persons above 30 years of age has been, in reality, mere chronic catarrh, complicated with disease of the heart, and emphysema of the lungs. But whatever may be thought on that point, as a general position, it is very certain that the proportion of morbus cordis included in the 520 and odd cases here referred to much exceeds that of phthisis. The cases of heart disease amounted to 170 (to speak in round numbers), and those of phthisis to less than half, or about 80. Now this difference has not been caused by any selection at admission, or at the time of *post-mortem* inspection. Every proper case was admitted on application, and every case that proved fatal, and for which permission could be obtained, was examined without distinction of disease. That it was not mere accident seems probable from the fact, that in the case of either sex the preponderance was in favour of heart disease. In the case of the males, the ratio of phthisis to morbus cordis was :: 2 : 3; and in that of the females it was nearly :: 6 : 7.

I confess it seems to me more probable that the difference between the generally-received proportion of disease of the heart to other diseases, especially phthisis, and that obtained by myself, is owing to this: viz., that on the one side, the diagnosis has been, in a large proportion of cases, conjectural during life, while after death no sufficient examination has been made; and that, on the other side, the diagnosis has been always based on anatomical, as well as instrumental, examination. This, I say, seems more probable, than that the result at which I have arrived, with the aid of unusual facilities and precautions, should be so far wide of the truth as to represent a disease that really amounted to 1-5th of the whole fatal disease of the country, as one half less frequent, even in a single district, than another disease, of supposed comparatively rare occurrence. Whatever also, it is to be noticed, may be the effect of indiscriminate admission and protracted residence, it is common to both diseases, so far as my observations are concerned, and cannot be supposed to affect the ratio: so that on the whole, when I recollect the numerous diagnostic errors into which I have myself fallen in pectoral diseases, and those which I have known committed by other practitioners, and call to mind the difficulty, in general, of accurate diagnosis in the same class of disorders; remembering also the recency of the promulgation of the invaluable mechanical diagnosis of Avenbrugger and Laennec, and the confusion not yet sufficiently remedied of several distinct diseases being classed under the one name of *Consumption*, or *Decay*, and its synonyms: viz.—

1. Chronic bronchitis, concurring in scrofulous and cachectic subjects, with loss of flesh and some fever—

2. Chronic cough, complicated with, and rendered inveterate by, hypertrophy of the bronchial ramifications and dilatation of the air-cells—

3. The same, complicated with, and rendered incurable by, morbus cordis; generally on the left side, sometimes on both sides of that organ—

4. True phthisis, which is always complicated with bronchitis, and pretty frequently with considerable hypertrophy of the heart—

5. Glandular marasmus in children, without, in many cases, any strictly pulmonic disease;—

when I recollect those facts, I cannot avoid feeling very sceptical as to the alleged paramount importance of true phthisis, and suspecting that in male adults, at least, the most frequent of all fatal chronic disorders of these islands is disease of the heart. In this, perhaps rash assertion, I have the satisfaction of finding that I go but one step in advance of one of the ablest practitioners, and largest and least fanciful observers, that have especially studied the pathology of the heart. Baron Corvisart affirms without hesitation, that the most frequent organic diseases, except pulmonary consumption, are those of the heart; and that death from cardiac lesion is much less rare than from lesion of either the brain, the stomach, the liver, the spleen, or the kidneys, or perhaps from the diseases of all those parts together.

Before passing on to the next topic I would dwell a moment on a remarkable contrast between morbus cordis and phthisis, in their relations to age, which is apparent in the table, and which is both curious in itself, and pertinent enough to my present argument. If,

on the male side of the table, we compare the distribution of morbus cordis with that of phthisis, we find a striking contrast. The percentage proportion of morbus cordis to the total number of cases, including phthisis and morbus cordis, at each interval of age, is as follows:—for the first, from 15 to 30, it is 21 per cent.; for the second, it is 36; for the third, it is 40½; and for the fourth, it is full 42 per cent. Whereas for phthisis the distribution changes in an inverse manner, being for the first age 45 per cent.; for the second, 28; for the third, 20; and for the fourth, 10 per cent. only; not more than 1-4th of what it was before 30. Then, on the female side, we have results agreeing sufficiently with those just stated on the male to render it probable that there is something more than chance in the matter. On the female side we obtain the following facts:—morbus cordis gives for the ages 15 to 30, 15 per cent.; from 30 to 50, 17 per cent.; and, from 50 to 70, the ratio rises to 29 per cent., and, above 70 years, to 33½ per cent.: while on the female, as well as on the male side, phthisis seems to decline with age, being for the first interval of age 24 per cent.; for the second, a little more than 17 per cent.; and for the third, about the same, 16·4; and for the fourth, only 5 per cent. Now the conclusion to which these facts lead, viz., the superior prevalence of morbus cordis, as compared with true phthisis, at advanced ages, is confirmed by several passages in the classical work of Sir James Clark, especially by statements illustrating the influence of sex and age in the production of phthisis. In Chapter VIII. tables are given, exhibiting the mortality from phthisis in persons above 15, in seven cities of Europe and America, which shew that in almost each city there is a pretty uniform decline in the ratio of deaths from phthisis, from 20 years to extreme age: and the facts furnished by the excepted city, viz., Berlin, are at least a century old, being taken from Süßmilch. In Edinburgh the ratio declines from ·285 at 20 years to ·052 above 60 years; at Nottingham, from ·416 to ·017, in the same period of time; at Chester, from ·245 to ·054; at Carlisle, from ·290 to ·097; and at Paris, according to Louis, from ·325 to ·042; while the general average decline was from ·285, or 28·5 per cent., at 20-30, to ·078, or 7·80 per cent. above 60.

The following unpublished table, deduced some time since by my brother, Dr. G. Clendinning, now not in the profession, from observations registered at the Mary-le-bone Infirmary, confirms the results to which Sir J. Clark's enquiries have led him.

Of 1044 deaths from phthisis occurring in the workhouse and infirmary, jointly, of the parish of Mary-le-bone, between May, 1821, and December, 1835, the distribution according to age was as follows:—

	Number of Deaths from Phthisis.	Per-Centage Proportion at each Age.		Number of Deaths from Phthisis.	Per-Centage Proportion at each Age.
Under 5 years	70	8·33	From 50 to 60 years	121	11·59
From 5 to 10 "	17		" 60 " 70 "	97	9·29
" 10 " 20 "	53	5·08	" 70 " 80 "	45	4·31
" 20 " 30 "	247	23·66	" 80 " 90 "	7	0·67
" 30 " 40 "	223	21·36			
" 40 " 50 "	164	15·71	Total . . .	1,044	100·

According then to the above, and Sir James Clark's table, the distribution of phthisis according to age is nearly such as I have stated, viz., phthisis declines in frequency soon after puberty, and has been comparatively rare in middle life; when it is for the most part superseded, as I conceive, in frequency and fatality, by morbus cordis; and in extreme age it has disappeared nearly altogether. It is to be regretted that, with respect to morbus cordis, I am precluded from producing a similar confirmation of my results, partly owing to the frequent exclusion of aged people from hospitals, and partly owing to the neglect of instrumental means of *post-mortem* diagnosis, and the confidence misplaced by pathologists in their manual and visual skill.

ENDOWED CHARITIES IN CORNWALL.

Abstract and Analysis of the Commissioners' Report. By JAMES WHISHAW, Esq., F.S.A.

[Read before the Statistical Society of London, 14th May, 1838.]

No attempt appears to have been hitherto made to put into a compendious and readable form the numerous Reports of the Commissioners of Charities Inquiry, notwithstanding they throw much light upon, and supply valuable details respecting, the extent and distribution of the vast funds appropriated to charitable purposes in England and Wales.

The subject indeed, which is scarcely less intimately connected with the comforts and welfare of the poor than with the personal interests of their more favoured brethren, seems to be highly deserving of the attention of the Statistical Society. Under this impression, I have availed myself of the first part of the 32nd Report of the Commissioners of Charities for the purpose of laying before the Society the following analysis and details of the endowed Charities in Cornwall. The circumstance of this county being one of the few in which all the charities have been investigated and reported upon within a very recent period was the reason of selecting it for the present paper.

The total number of charities in Cornwall is 240, and their aggregate annual income 3,661*l.* 2*s.* 9*d.* This revenue is distributed among 120 out of the 205 parishes of which the county consists; thus giving upon an average two charities, and 30*l.* 10*s.* 2*d.* to each parish. The respective incomes of these charities, which vary in amount from 243*l.*, the highest, to 2*s.* 6*d.*, the lowest, are as undermentioned:—

	£.	s.	d.	£.
9 which amount to	100	0	0	and are under 250
9 ,,	50	0	0	100
22 ,,	20	0	0	50
24 ,,	10	0	0	20
62 ,,	5	0	0	10
88 ,,	1	0	0	5
26 ,,	0	2	6	1

The subjoined table, which contains a detailed account of the nine principal charities, will serve as well to exhibit the character and particulars of those donations, as to illustrate the manner in which the entire Report of the Commissioners, so far as relates to this county, is abstracted in the paper which accompanies this communication:—

Borough or Parish.	Name of Charity or Donor, with the Date of Foundation.	Property.	For what Purpose given.	Income.	How applied.	Observations.
St. Austell.	Fairs and Markets, 13 ch. 2.	Profits of fairs and markets.	The benefit of the inhabitants of the parish.	£. s. d. 243 0 0	Partly to the poor and partly to the church rates.	In 1731, the rent at which the fairs and markets were let was expressly reserved to the use of the poor.
Liskeard.	Town and parish lands	Houses and lands.	Not precisely known . .	193 1 0	The repairs of the church.	The trust in the successive settlements (the last being in 1809), is to such uses as the mayor and burgesses should declare; the generality of the trust being modified by a previous declaration that the town and parish was the object to be benefited.
St. Stephen's by Launceston.	John Horwell, 1707	Stock . .	Maintaining, clothing, educating, and apprenticing, 6 poor boys.	192 13 4	As directed.	
Stratton.	The town and church lands.	. .	Not known.	189 5 10	43% to the church rates, 18% to parish schools, and the remainder to the poor, &c.	Part of the land is stated to be very much underlet.
Lanwett.	Parish lands . . . .	. .	Not known	150 16 0	17% to the school annually, and the remainder is added to the poor-rates.	
Fowey.	Jonathan Rashleigh's almshouses, or St. Wen's charity.	House, land, and tithes.	Endowing an almshouse for 8 poor people.	150 0 0	In supporting sixteen almshouse-people.	
Truro.	Henry Williams's almshouse, 1629.	Houses, lands, &c.	Founding and endowing an almshouse for 10 poor people.	125 19 4	In paying 10 almshouse-people 4s. a week, and supplying them with clothing.	Part of the property is let upon leases for lives, fines being taken in respect of them. The value of the entire property at rack rent, therefore, is considerably more than the income here given.
Madron.	George Daniel, 1770	Houses and lands.	Maintaining a free school for the poor of Penzance, Madron, and Morval.	106 17 6	As directed.	There are 60 boys upon the foundation, who are taught reading, writing, and arithmetic.
St. Paul.	Stephen Hutchens, 1709	Houses and lands.	Building a hospital or almshouse, and maintaining therein 6 of the poorest men and 6 of the poorest women.	100 15 0	As directed.	

The general distribution of the aggregate income, and the amount applied under each particular head, are as follow:—

	£.	s.	d.
1. Schools and other purposes connected with education .	982	12	2
2. Poor not receiving relief	510	4	3½
3. Poor generally	523	7	0½
4. Almshouses	434	18	10
5. Horwell's Charity	147	17	4
6. Apprenticing	52	0	0
7. Clergymen for preaching sermons on particular days .	41	12	4
8. Repairs of churches, and otherwise in aid of church } rates	608	4	0
9. Poor-rates	352	2	6
10. Miscellaneous	8	4	3
	<hr/>	<hr/>	<hr/>
	£3661	2	9

A few remarks in reference to each of the above heads will illustrate more fully the application of these charity funds.

1. *Schools, &c.*—It is satisfactory to observe, by this statement, the large proportion of the total revenue which is appropriated to educational purposes. It is a source of regret, however, that there are three donations, the income arising from which is withheld, on account of there being no school or master entitled to claim it; and that in three other cases the money is paid to teachers who give no instruction for it. The number of schools supported wholly, or in part, by the 982*l.* 12*s.* 2*d.*, and in which the instruction is given free, either to all or to a particular number of children, is about twelve; among which is a free-school at Madron, containing 60 boys, and a mathematical school at East Looe, containing 50 boys, who are taught reading, writing, and arithmetic; with a grammar-school at Penzance, at which the number of boys instructed is not given. The remainder of this money, with the exceptions referred to, is given among schoolmasters and schoolmistresses in 34 different parishes, for teaching children belonging to them—sometimes to read, write, and cast accounts—frequently to read and write only—and still more frequently merely to read. Among the donations under this head there is rather a curious one by the widow of Sir Humphry Davy. This lady gave 100*l.* stock to the corporation of Penzance, the interest of which she directed should be paid to the master of the grammar-school, upon the condition of his giving his boys a holiday on the anniversary of Sir Humphry's birth-day.

2. *Poor not receiving Relief.*—By poor not receiving relief is meant such indigent persons as do not receive constant or permanent aid from the poor's-rates. In three parishes the income is expended in bread, in two parishes in flour and beef, and in one in clothing; which articles are distributed in certain proportions among the different objects of each particular charity, who seem to consist most frequently of poor widows, labourers, and housekeepers. Among the charities which constitute this class is a small one, which, from the ostentatious character of the condition attached to it by the donor, is deserving of notice. It is a gift by John Randall of 20*s.* yearly for the benefit of poor widows and fatherless children of the parish of Budock, and also of 10*s.* yearly for preaching a funeral sermon on the feast of St. John the Evangelist;

both gifts to be paid provided the parishioners cause the same to be set up in the parish church, with the donor's name in large letters.

3. *Poor generally.*—Under this head is comprehended every description of poor—the distribution being made without reference to their receiving parish relief. Though the distribution is also in other respects most frequently indiscriminate, in several parishes a selection is made of the particular objects; and, in this way, “poor labourers,” the “deserving poor,” “poor widows,” the “poor of good character,” and the “industrious poor,” participate in the benefits derived from specific donations. The money, too, as in the case of the distributions falling under the preceding head, is in some instances laid out and given away in bread, clothing, &c.

4. *Almshouses.*—(The number of poor who are wholly or in part maintained in almshouses by the 434*l.* 18*s.* 10*d.*, is 63.)—They are generally selected from that class of indigent persons who contrive to support themselves without assistance from the parish-rates. A particular account of three of the most important of the almshouses will be observed to form part of the tabulated statement before given of the nine principal charities.

5. *Horwell's Charity.*—An account of this charity is also included in the tabulated statement, where the income given is 192*l.* 13*s.* 4*d.*, which is appropriated in the following manner:—

	£.	s.	d.
For maintaining and clothing the six poor boys . . .	147	17	4
Paid to a schoolmaster for teaching them reading, writing, and arithmetic	19	16	0
Reserved yearly as a fund for providing premiums for apprenticing them	25	0	0

It does not appear from the Commissioners' Report what proportion of the income is paid to the schoolmaster; but as a decree of the Court of Chancery directs that three-thirtieths should be so applied, I have presumed an application to that extent to be made, and calculated the amount accordingly. The sums of 19*l.* 16*s.* and 25*l.* are respectively included under the heads of “Schools” and “Apprenticing.” The circumstance of this charity being totally unlike any of the others was the reason for placing it under a separate head.

6. *Apprenticing.*—The entire number of boys apprenticed for the 52*l.* does not appear. It would seem, however, that, in respect of 40*l.* of it, six boys are apprenticed annually to various trades.

7. *Clergymen for Sermons.*—These bequests to clergymen are generally accompanied by donations to the poor, and are frequently given for preaching sermons on the anniversary of the donor's birth or death, or upon the occasion of distributing an accompanying gift to the poor, when such distribution is directed to take place annually.

8. *Repairs of Churches, &c.*—A small part of this money was given to the poor; the appropriation, therefore, of this part to the church-rates is a misapplication.

9. *Poor-Rates.*—By the payment of this sum of 352*l.* 2*s.* 6*d.* to the poor-rates, the poor not receiving parish relief are deprived of the money; it being an erroneous supposition, prevalent in this as well as in every other county in England, that charities given to the poor in general terms, or for the relief or support of the poor, are applicable in

aid of parish-rates. In several counties, the amount of charity-money thus misapplied is very considerable.

10. *Miscellaneous*.—The principal item of which this 8*l.* 4*s.* 3*d.* is composed is 4*l.* 10*s.*, paid annually to a parish clothing-club.

I must not omit to notice that in various parishes in Cornwall several charities have been given, which, owing to the negligence of some parties, the insolvency of others, and other causes, appear to be now wholly lost. The aggregate income of those whose income is stated in the Report is 473*l.* 4*s.* 6*d.*; but their total annual value may be fairly set down at 500*l.*, as there are two whose incomes do not appear. Of the total amount, 85*l.* was given for educational purposes. In conclusion, we may notice the extremely small number and amount of charitable endowments in Cornwall as compared with those in other counties, and particularly the absence of a single bequest for the benefit of a hospital for the sick. This latter fact may perhaps be accounted for by the circumstance of there being but few establishments of the kind in the county.

With the exception of Cumberland, which has only a population of 169,681, Cornwall, of which the population is 302,440, possesses the smallest amount of charity property of any county in England. The present paper, however, will afford an insight into the mode in which the great mass of money arising from charity endowments in this country is applied.

The following table, compiled from the most recent parliamentary documents, will indicate the extent of property applicable to charitable purposes in the eighteen counties of England in which the enquiries of the Commissioners of Charities are completed and reported.

County.	Population in 1881.	Income for Education.			Income for other Charitable Pur- poses.			Total.		
		£.	s.	d.	£.	s.	d.	£.	s.	d.
Bedford . . .	95,383	1,841	3	4	12,119	0	8	13,960	4	0*
Buckingham . .	146,529	1,583	12	1	9,815	15	5	11,399	7	6
Cumberland . .	169,681	1,930	12	0	1,464	1	2	3,394	14	0
Gloucester . .	386,904	5,435	10	7	14,072	0	4	19,507	10	11
Hertford . . .	143,341	2,865	4	11	9,345	17	2	12,211	2	1
Huntingdon . .	53,149	1,026	4	10	2,706	10	8	3,732	15	6
Lancaster . . .	1,336,854	18,715	2	8	17,011	4	4	35,726	7	0
Monmouth . . .	98,130	1,933	3	10	2,950	7	9	4,883	11	7
Norfolk . . .	390,051	6,242	17	3	30,943	15	0	37,186	12	3
Northumberland	222,912	2,526	18	11	3,747	0	7	6,273	19	6
Nottingham . .	225,320	3,029	6	3	13,337	8	7	16,366	14	10
Rutland . . .	19,385	1,487	8	0	3,295	18	4	4,783	6	4
Salop . . .	222,503	6,449	15	6	15,086	17	9	21,536	13	3
Stafford . . .	410,485	7,133	11	9	13,286	1	3	20,419	13	0
Suffolk . . .	296,304	3,991	1	10	24,193	5	6	28,184	7	4
Warwick . . .	336,988	12,516	10	8	29,630	12	6	42,147	3	2
Westmoreland .	55,041	2,261	11	9	3,070	7	8	5,331	19	5
Wilts . . .	239,181	2,094	19	11	14,527	7	8	16,622	7	7
Total . £		83,064	16	11	220,603	12	4	303,668	9	3

* Since the inquiry of the Commissioners was made the leases of a part of the property belonging to Harpur's Charity have fallen in, and the income has consequently become nearly doubled, so that instead of 920*l.*, stated in the Commissioners' Report to be derived from Harpur's Charity, the annual income now derived from that source for education alone is upwards of 3,000*l.*

4 *Statement of the Progress of the Principal Branches of the Public Revenue, at different periods during the present century, shewing the actual produce of Taxation, and its produce in comparison with the increased Population.* From the "Progress of the Revenue," by G. R. PORTER, Esq. F.R.S. &c.

		Total.
1811	Amount collected in 1801	£33,081,821
	Duties and Taxes imposed between 1801 and 1811	28,597,600
	Amount to be received in 1811 by computation	61,679,421
	Amount actually collected in 1811	64,342,741
	Amount received beyond the computed amount	2,663,320
	Amount which should have been received, taking into account the increase of 13½ per cent. of population	70,006,142
	Amount deficient in proportion to increased population	5,663,401
	Amount collected in 1801	33,081,821
	Duties and Taxes imposed between 1801 and 1821	35,189,208
	Duties and Taxes repealed, &c. between 1814 and 1821	68,271,029
1821	Amount to be received in 1821 by computation	19,493,733
	Amount actually collected in 1821	48,777,296
	Amount received beyond the computed amount	54,477,641
	Amount received beyond the computed amount	5,700,345
	Amount which should have been received, taking into account the increase of 29½ per cent. of population	63,288,543
	Amount deficient in proportion to increased population	63,288,543
	Amount collected in 1801	8,810,902
	Duties and Taxes imposed between 1801 and 1831	33,081,821
	Duties and Taxes imposed between 1801 and 1831	36,841,192
	Duties and Taxes repealed, &c. between 1814 and 1831	69,923,013
1831	Amount to be received in 1831 by computation	38,467,121
	Amount actually collected in 1831	81,455,822
	Amount received beyond the computed amount	46,161,674
	Amount received beyond the computed amount	14,705,782
	Amount which should have been received, taking into account the increase of 48½ per cent. of population	46,711,999
	Amount deficient in proportion to increased population	46,711,999
	Amount collected in 1801	550,325
	Duties and Taxes imposed between 1801 and 1836	33,081,821
	Duties and Taxes imposed between 1801 and 1836	37,084,187
	Duties and Taxes repealed, &c. between 1814 and 1836	70,166,008
1836	Amount to be received in 1836 by computation	43,691,377
	Amount actually collected in 1836	26,474,631
	Amount received beyond the computed amount	48,547,435
	Amount received beyond the computed amount	22,072,804
	Amount which should have been received, taking into account the increase of 59½ per cent. of population	42,227,036
	Amount in excess in proportion to increased population	42,227,036
	Amount collected in 1801	6,320,399
	Duties and Taxes imposed between 1801 and 1836	33,081,821
	Duties and Taxes imposed between 1801 and 1836	37,084,187
	Duties and Taxes repealed, &c. between 1814 and 1836	70,166,008

"This statement shews that although the amount of taxes received in 1811 was greater than the computation made, from the duties imposed, by the sum of 2,663,320*l.*, it was smaller than the amount which should have been received by 5,663,401*l.*, when we take into account the increase which had been experienced in the numbers of our population. In 1821 the amount actually collected was 5,700,345*l.* beyond the computed amount, but 8,810,902*l.* below the sum that should have been received, considering that the population was then greater by 29*1*/₄ per cent. than it was in 1801. Between 1821 and 1831 taxes were repealed beyond what were imposed, amounting to 17,321,404*l.*, and the effect of this reduction was immediately seen in the proportionally greater consumption of articles upon which the old or modified duties were continued. The amount received into the Exchequer in 1831 was greater than the amount by computation to the extent of 14,705,782*l.*, and was within 550,325*l.* of the sum which it should have reached, considering the increased number by whom it was contributed. It will further be seen, that in 1836, when the public burdens had been still further reduced by 4,981,261*l.*, the amount of duties and taxes received was greater than it should have been by computation to the extent of 22,072,804*l.*, and greater also by 6,320,399*l.* than the remaining taxes would have yielded at the same rate of consumption by the increased numbers of the people."

The following table exhibits the deficiency or excess of the principal branches of revenue in comparison with the increased population at the same periods. It has been found necessary to throw together the Customs and Excise duties in consequence of the numerous transfers, as regards the collection of revenue, which have been effected between those two departments.

Deficiency or Excess in comparison with increased Population.

	Customs and Excise. Deficiency. <i>£.</i>	Stamps. Excess. <i>£.</i>	Taxes. Deficiency. <i>£.</i>	Post Office. Deficiency. <i>£.</i>	Total. Deficiency. <i>£.</i>
1811	2,495,042	989,301	4,120,985	36,675	5,663,401
1821	9,083,729	1,099,270	356,403	470,040	8,810,902
1831	1,303,953	1,400,549	160,979	485,942	650,325
	Excess.	Excess.	Excess.		Excess.
1836	4,435,212	1,476,109	911,996	502,918	6,320,399

EMIGRATION FROM THE UNITED KINGDOM.

Abstract of Official Reports, 1838.

In presenting an Abstract of the Reports of the Agent-General and other officers for Emigration, it may be expedient to review the principal Parliamentary and administrative proceedings on the subject for some years past.

Two Committees of the House of Commons upon Emigration sat in 1826 and 1827, of which Mr. Wilmot Horton was chairman. The first reported, generally, the facts and principles from which it deduced the conclusion, that there was a greater amount of labouring population in the United Kingdom than could be profitably employed, and that the British Colonies afforded a field where the excess could be advantageously occupied. The next Committee entered further into detail, and pointed out more specifically the nature and extent of the assistance which it would recommend to be given to emigration from national resources. The information collected by these Committees was various and extensive; the probable reason why their labours were not productive of more immediate practical fruit is, that they assumed that in order to ensure the welfare of the emigrants it was necessary to establish them upon land, and (almost a necessary corollary from an opinion so

fraught with expense) that repayment should be required of the funds laid out for their benefit. The first condition was too burthensome, the second too precarious, to be generally well received. In point of fact, in the case of a few settlements of people which have been made at the public charge by way of experiment, the result has been very gratifying as regarded the well-being of the parties, but it has also demonstrated the great costliness of the operation. On the other hand, various examples in America and in Australia have shewn at once the vexatiousness and the futility of trying to obtain repayment of large amounts of money, advanced in small sums, to poor emigrants.

In 1831 a Government Commission upon Emigration was formed, consisting of the Duke of Richmond, Lord Howick, Mr. Francis Baring, Mr. Hay, and Mr. Henry Ellis. The Commissioners found that the emigration to Canada had increased, in the five years ending with 1831, from an annual average of about 9,000, during the first ten years after the Peace, to an annual average of more than 20,000; that the number of people who had passed through Quebec in the single year 1831 exceeded 50,000; and that these great multitudes had gone out by their own means, and disposed of themselves through their own efforts, without any serious or lasting inconvenience. They determined, therefore, not to interfere by a direct grant of money with a practice which appeared to thrive so well spontaneously, but contented themselves, in regard to the North American Colonies, with collecting, publishing, and diffusing as widely as possible, correct accounts of prices and wages; and with pointing out in the same notices the impositions against which emigrants to those colonies should be most on their guard. Officers were at the same time appointed both there and in this country to watch over the interests of emigrants, to advocate their rights gratuitously before the magistrates, and to furnish them with every information that might seem conducive to their welfare; and, at the instance of the Government, a small tax of 5s. per head was imposed by the Provincial Legislatures upon emigrants, the proceeds of which were appropriated to maintain hospitals for the sick, and to provide a conveyance for the indigent to those places where their labour appeared most in request. With these auxiliary and precautionary measures, designed to give facility and security to emigration, the expense of the transit itself was left to be defrayed, as before, from private resources.

While such was the course adopted in regard to the British provinces in North America, the Commissioners took a different view of emigration to New South Wales and Van Diemen's Land. They observed that, partly from the greater expense of conveyance, and partly perhaps, from the want of an original impulse, there could not be said to exist any voluntary emigration of labouring people to the Australian colonies. The merchants did not even think it worth while to provide accommodation in their ships for persons in that class of society. Great evils were also found to arise from the disproportion between the sexes in New South Wales and Van Diemen's Land. Under these circumstances the Commissioners warmly concurred in the plan, which was at that time introduced, of not disposing of the public lands in the colonies, except by sale, and of applying the proceeds, in Australia, to the encouragement of emigration. They obtained an advance for the

purpose from the English Treasury, and they set on foot a scheme for its application to the proposed object, by allowing loans of 20*l.* towards the passage-money of suitable families of mechanics or agricultural labourers, and bounties of 8*l.* towards the conveyance of young unmarried females. Simultaneously with these proceedings, they succeeded in inducing several ship-owners, both in London and Liverpool, to make arrangements for conveying passengers on a new scale, which caused an immediate reduction of the price from 30*l.*, or 35*l.*, and upwards, to about 18*l.* From that time to this there has been an uninterrupted resort of free working people to New South Wales and Van Diemen's Land, both with and without public assistance.

The Commission for emigration was dissolved in 1832, and the practical working of its recommendations was left to the Colonial department. It is not necessary to dwell at length on the succeeding period up to the end of 1836. Various additions were made to the number of agents stationed at the out-ports of the United Kingdom, for the protection and assistance of people going to the colonies. An amended Passengers' Act was passed in 1835, in which were included some improvements suggested by the advice to emigrants that had been circulated by the Commissioners. With respect to Australia, it was before long found advisable to convert the loan to working people who went out with their families into a gift, and to raise its amount to 30*l.*; and likewise to raise the amount of the bounty to single females to 12*l.* A great proportion also of the latter class were sent out separately in ships expressly provided for their conveyance; and in their selection the Secretary of State accepted the services of a charitable committee of gentlemen in London. The following is a statement, as far as can be made out, of the whole number of persons assisted to emigrate to New South Wales and Van Diemen's Land, during the five years from the commencement of the system in 1831 to the end of the year 1836:—

	New South Wales.	Van Diemen's Land.	Total.
Men, Women, and Children, in Families	2,228	2,051	4,279
Single Females.	2,008	1,562	3,570
Total in Five Years	4,236	3,613	7,849

From this statement it follows, that the annual average of people assisted to go to New South Wales was 847; to Van Diemen's Land, 722; and to the two together, 1,569. By degrees dissatisfaction arose with the manner in which the selection of people was made. Irregularities and disease broke out in some of the vessels, which seemed traceable in great measure to the want of sufficiently-effective and experienced superintendence on board; and the result was a recommendation from the Government of New South Wales that the emigrants who were to receive the benefit of assistance from Government should be chosen for each vessel by a surgeon of the Royal Navy, who should go out with them, and be responsible for his selection; and that the shipping should either be provided by the transport department of the Admiralty, or, in situations where that could not be done, by the proposed surgeon-superintendent of each expedition. This mode of pro-

ceeding, with some modifications, took effect from the commencement of 1837. The two first ships sailed in March, and, on the 17th of April in that year, the present agent-general for emigration entered upon his duties.

New South Wales and Van Diemen's Land.

If any proof were needed of the remarkable resources of New South Wales, it might be well derived from the history of the plan for applying its land revenues to the encouragement of emigration. The Secretary of State did not venture, in 1831, to ask for an advance of more than 10,000*l.* on the faith of that fund; nor did the whole revenue from land in 1832, the first year in which sales began to be made, amount to more than 13,683*l.* In the next year it was 26,272*l.*; in 1834, 43,482*l.*; in 1835 it was 89,380*l.*; and the amount in 1836, being five years from the commencement, was no less than 132,396*l.* To extend, therefore, the emigration, in some proportion to the increased funds and the increased wants of the Colony, there were despatched, in the year 1837, to New South Wales and Van Diemen's Land, 10 ships, hired, fitted, and provisioned by the Government, containing 2991 persons, of whom 1504 were adults, and 1487 were children under 14 years of age. Of these people 300 sailed for Van Diemen's Land; but no more have been sent there since, in consequence of Sir J. Franklin's despatch, dated the 12th of April, 1837, which seems to shew that there is not any longer, in that colony, a demand for the introduction of large bodies of labouring people. The remaining 2,700 emigrants were destined to New South Wales.

In 1838 five ships had gone, up to the 28th of April, and arrangements are made for seven more to sail before the end of June, all twelve to New South Wales; which, even though the average number in each be estimated so low as 260, will take from hence upwards of 3,100 souls in the first six months of this year. Of these ships four have been filled from England, four from Scotland, and the remaining four from Ireland.

The average annual number of emigrants sent to New South Wales, previously to the present system, has been mentioned above to have been 800; more than three times as many, therefore, were sent to the colony last year; and about four times as many are to be sent in the first half of this year, being at the rate of eight times as many per annum. The people may be said to be now going as fast as is required for the complete expenditure of the fund applicable to the object. Further advices may shew a fresh augmentation of this remarkable branch of revenue; but by the Report of a Committee of Council, which accompanied Sir Richard Bourke's despatch of the 8th of September, 1837, the proceeds of the lands, for two years to come, seem estimated at 120,000*l.* per annum, of which one-third is reserved for the bounties, payable in the colony, on account of emigrants introduced by resident settlers. The remainder is 80,000*l.*, which is not a sum that would admit of more than 20 ships being sent in the year. It is to be observed, that while the number of people sent out in public vessels has been so largely extended, there does not appear to have been any diminution, but on the contrary, an increase, of emigration through other channels.

There was not at first much alacrity to emigrate from England in the public vessels. Dr. Galloway stated that he had to travel over a con-

siderable part of Wiltshire, Dorsetshire, and Hampshire, and also to visit the eastern part of Sussex, in order to provide a sufficient number of passengers for a small ship, which sailed from Portsmouth in June, 1837. In the autumn of the same year a vessel was allotted to the county of Norfolk; but, although the measure had been settled for some months, and was arranged expressly to meet the convenience of the parties, the whole of them changed their minds at the last moment; and, within a fortnight of the time appointed for the ship's sailing, with a certain expenditure of between 4000*l.* and 5000*l.* incurred, only three families remained willing to go. Circumstances are much changed this year; no difficulty has been found in filling four ships already from the county of Kent alone, and numbers of candidates have been rejected for want of room. From Scotland and Ireland the supply of emigrants has never been scanty since the first months of 1837.

I.—A Return of Persons who have Emigrated from the United Kingdom to the British Colonies and the United States of America, during each Year from 1825 to 1837.

Years.	British Colonies in N. America.	United States of America.	Total to America.	Cape of Good Hope.	Australian Colonies.	Total.
1825	8,741	5,551	14,292	114	485	14,891
1826	12,818	7,063	19,881	116	903	20,900
1827	12,648	14,526	27,174	114	715	28,003
1828	12,084	12,817	24,901	135	1,056	26,092
1829	13,307	15,678	28,985	197	2,016	31,198
1830	30,574	24,887	55,461	204	1,242	56,907
1831	58,067	23,418	81,485	114	1,561	83,160
1832	66,339	32,872	99,211	196	3,733	103,140
1833	28,808	29,109	57,917	517	4,093	62,527
1834	40,060	33,074	73,134	288	2,800	76,222
1835	15,573	26,720	42,293	325	1,860	44,478
1836	34,226	37,774	72,000	293	3,124	75,417
1837	29,884	36,770	66,654	326	5,054	72,034
Total .	363,129	300,259	663,388	2,939	28,642	694,969

II.—A Return of the Annual Number of Emigrants, on an Average of Three Years, from 1834 to 1836, from the Principal Ports of the United Kingdom; distinguishing with an Asterisk those Ports at which are appointed Agents for Emigration.

ENGLAND.		SCOTLAND.		IRELAND.	
Ports.	Numbers.	Ports.	Numbers.	Ports.	Numbers.
*London . . .	8,836	*Leith . . .	500	*Dublin . . .	3,928
*Liverpool . .	21,815	*Greenock . .	2,864	*Cork . . .	4,538
*Bristol . . .	874	Aberdeen . .	950	*Belfast . .	3,353
Yarmouth . .	1,237	Inverness . .	527	*Sligo . . .	2,479
Hull . . .	979			*Limerick . .	1,498
Plymouth . .	847			*Londonderry	4,709
Portsmouth . .	297			Waterford . .	1,367
				Galway . . .	487
Total . . .	34,885	Total . . .	4,841	Total . . .	22,369
Total from the United Kingdom . .		62,085			

III.—*A Return of the Number of Emigrants to each Colony, in the Year 1837.*

	COLONIES.				
	British North America.	United States.	Cape of Good Hope.	Australian Colonies.	Total.
England . . .	5,027	31,769	325	3,381	40,502
Scotland . . .	2,394	1,130	1	1,254	4,779
Ireland . . .	22,463	3,871	..	419	26,753
Total . .	29,884	36,770	326	5,054	72,034

The Ports from which Emigrants have sailed in 1837, besides those mentioned in Table II., are Beaumaris, Berwick, Bideford, Cardiff, Exeter, Falmouth, Lynn, Whitby, Whitehaven, Dundee, Glasgow, Port Glasgow, and Westport.

Prices and Wages in New South Wales and Van Diemen's Land.

The object of the following statements is to give a view of the latest information respecting the current rate of wages and market prices in the above colonies.

All statements of this kind must of course be taken with an allowance; the wages of labour are necessarily liable to vary with the relative supply and demand, and will also differ according to the capacity of the workman. Again, prices in New South Wales are exceedingly fluctuating; the price of food is affected in this colony, more than in most countries, by the nature of the seasons; and in respect to manufactured goods, both in New South Wales and Van Diemen's Land, the prices depend so much on arrivals from England that they cannot be usefully quoted. Nevertheless, it is believed that the following information, which has been obtained from the best authorities in the colonies, will be found sufficiently accurate to enable any man to form a sound judgment of what he may expect in the particulars to which they relate.

The mechanics in most demand, are, carpenters, joiners, cabinet-makers, stonemasons, stonecutters, bricklayers, brickmakers, blacksmiths (particularly if they can shoe horses), wheelwrights, and coopers. There likewise seems to be a considerable demand in the colony for boot and shoemakers, bootclosers, tailors, dyers and scourers, and woolsorters. Good mechanics appear to earn from 30s. to 40s. a week in Sydney, without lodgings or rations. Common labourers 14s. a week without rations, or 5s. 6d. a week with rations. The wages of mechanics in the country may be estimated at from 20l. to 40l. per annum, with house and rations. Country tradespeople, acquainted with making and repairing agricultural implements, and the erection of buildings necessary for agricultural purposes, are described as never in want of employment. The wages given to farm servants vary so much according to their qualifications, that it is difficult to name an average rate. A good ploughman will earn from 15l. to 20l. per annum, with a house and rations. Shepherds and stackmen the same. Mere agricultural labourers from 12l. to 15l. The fact of their being married or single does not seem to make any difference in the rate of wages; but it is mentioned, that couples recently united, and without children, will more readily find employment than if they are encumbered with a young family, in consequence of the expense of maintaining the same without adequate

benefit for their services. There is, however, always employment, it is said, for women as domestic servants, at from 7*l.* to 15*l.* per annum, with board or rations and lodgings suitable to their avocations. The servants mostly in requisition seem to be general house servants, who will also undertake washing and laundry work, or plain cooking; or girls to take care of children and perform needlework.

The rations issued by settlers is not quite uniform, but it seems generally to consist of about the following allowances per week:—10 lbs. of seconds flour; 8 lbs. of fresh beef or mutton, or 5 lbs. of salt pork; 1 lb. of sugar, and 2 oz. of tea, or seven quarts of new milk; 2 oz. of soap, and, in some instances, 2 oz. of tobacco. To women about two-thirds, and to children about one-third or half of these rations are allowed. In some cases only the meat and flour are given. The more humble class of settlers usually victual labourers at home at their own table, and in the same manner as they live themselves, instead of issuing to them separately the above rations.

House-rent is very dear in Sydney, but a married couple of emigrants might easily find a small house containing two rooms to accommodate them on their arrival, for a weekly rent of from 5*s.* to 10*s.*, and an unmarried man may lodge and board for half a guinea. A cottage, with four apartments, would be rented at about 10*s.* a week.

A Return shewing the Average Wages of the principal Mechanics and others in the Town of Sydney, for the Six Months ended 30th July, 1838, obtained from Returns transmitted by the First Magistrate to the Colonial Secretary's Office at Sydney.

Trade or Calling.	Average Wages per Diem.		Rates per Diem without Board or Lodging.		Trade or Calling.	Average Wages per Diem.		Rates per Diem without Board or Lodging.	
	Without Board or Lodging.	With Board & Lodging.	Highest.	Lowest.		Without Board or Lodging.	With Board & Lodging.	Highest.	Lowest.
Bread and Biscuit-bakers	4 6	5 3	7 0	3 6	Gardeners	3 0	1 4	3 0	..
Butchers	4 0	5 2	5 0	3 0	Grooms and Coachmen	4 0	£30*	4 0	..
Brickmakers	4 6	..	5 0	4 0	Joiners	6 3	..	6 6	6 0
Bricklayers	7 3	..	8 0	6 8	Labourers	3 3	1 8	3 6	3 0
Blacksmiths	6 8	4 3	8 4	4 7	Millwrights	8 0	..	10 0	7 0
Boat-builders	7 3	..	7 6	6 8	Overseers . . . . .	..	2 0	..	..
Boot-makers	5 10	3 6	7 0	4 0	Painters and Glaziers	5 4	3 0	6 0	4 7
Boot-closers	6 8	..	6 8	..	Plumbers and ditto	6 2	..	7 0	5 6
Carpenters	6 4	2 8	7 0	5 6	Plasterers	6 6	..	6 8	6 6
Cabinet-makers	6 4	3 8	7 0	5 6	Quarrymen	5 6	..	5 6	..
Coppersmiths and Braziers	6 4	..	8 0	4 6	Rope makers	4 6	2 6	5 0	4 0
Cutlers	5 0	..	5 0	..	Shoemakers	5 7	3 3	8 0	4 0
Curriers	7 6	5 2	10 0	6 8	Sail-makers	5 0	..	5 0	..
Coopers	6 6	3 9	7 0	6 0	Stone-masons	7 6	..	8 0	6 8
Cooks . . . . .	..	1 4	..	..	Shipwrights, Carpenters, and Joiners	8 0	..	8 0	6 6
Carters	3 6	1 8	3 6	..	Sawyers	7 2	..	9 0	6 0
Dyers and Scourers	5 0	3 0	5 0	..	Tailors	6 6	2 9	7 0	4 0
Farriers	5 5	..	5 5	..	Upholsterers	7 2	3 6	7 8	6 6
Fishermen	3 0	2 3	3 0	..	Weavers . . . . .	..	1 4	..	..
Fellmongers	5 0	..	5 0	..	Wool-spinners . . . . .	..	2 1	..	..
					Wheelwrights	6 0	£63*	7 6	4 2
					Whitesmiths	6 6	..	6 8	6 8

* Average wages per annum.

A Return shewing the Average Wages of the principal Mechanics and others in the Island of Van Diemen's Land in the month of June, 1836.

Trade or Calling.	Average Wages per Diem.		Average Wages per Ann.		Trade or Calling.	Average Wages per Diem.		Average Wages per Ann.	
	Without Board & Lodging.	With Board & Lodging.	With Board & Lodging.	With Board & Lodging.		Without Board & Lodging.	With Board & Lodging.	With Board & Lodging.	With Board & Lodging.
Bread and Biscuit bakers	s. d. 5 0	s. d. 3 0	£. s. d. 30 0 0		Milkmen	s. d. 3 6	s. d. 2 0	£. s. d. 30 0 0	
Butchers	5 0	3 0	30 0 0		Nursetymen	4 6	2 6	25 0 0	
Boat-builders	6 6	4 0	40 0 0		Painters	6 6	4 6	45 0 0	
Brickmakers	6 6	4 0	35 0 0		Plasterers	7 0	5 0	45 0 0	
Bricklayers	7 6	5 0	45 0 0		Ploughmen	5 0	3 0	40 0 0	
Blacksmiths	7 0	4 6	46 0 0		Plumbers	6 6	4 6	40 0 0	
Carriers	6 6	4 0	45 0 0		Quarrymen	5 6	3 6	30 0 0	
Carpenters	6 6	4 0	45 0 0		Rope-makers	5 9	..	..
Coopers	7 0	4 6	46 0 0		Shoemakers	6 0	46	35 0 0	
Cooks (Men)	3 6	2 0	25 0 0		Sawyers	7 0	50	35 0 0	
Cooks (Women)	3 6	1 6	17 0 0		Shipwrights	9 0	..	..
Coppersmiths	7 0	..	..		Stone-masons	7 6	5 0	40 0 0	
Cutlers	4 9	3 0	35 0 0		Stone-cutters	7 6	5 0	40 0 0	
Dyers	5 0	..	..		Sail-makers	6 6	..	..
Dairywomen	3 0	1 6	17 0 0		Slaters & Shinglers	6 6	4 0	38 0 0	
Farmers	4 6	2 6	30 0 0		Shepherds	4 6	3 0	30 0 0	
Farmers	5 0	3 0	45 0 0		Soap-makers	4 6	..	..
Fellmongers	6 0	4 0	45 0 0		Tanners	6 0	4 0	38 0 0	
Gardeners	6 0	3 6	35 0 0		Tailors	6 6	4 6	40 0 0	
Glaziers	6 0	4 0	40 0 0		Tinplate-workers	5 0	2 0	30 0 0	
Joiners	7 0	5 0	45 0 0		Upholsterers	7 0	5 0	40 0 0	
Labourers	4 0	2 0	20 0 0		Wheelwrights	7 0	5 0	45 0 0	
Millwrights	8 6	5 0	55 0 0		Wool-sorters	7 6	5 6	45 0 0	

Note.—The rates of wages here stated are to be obtained by good workmen only; in fact, indifferent and bad workmen find a great difficulty in procuring employment at any rate.

A Return of the Average Prices of Provisions, &c. at Sydney, New South Wales, during the Six Months ended 30th June, 1836, and in the Island of Van Diemen's Land, during the Month of June, 1836.

ARTICLES.	Sydney, New South Wales.	Van Diemen's Land.	ARTICLES.	Sydney, New South Wales.	Van Diemen's Land.
	Average Prices in first Half-year of 1836.	Average Prices in June, 1836.		Average Prices in first Half-year of 1836.	Average Prices in June, 1836.
Wheat . . per bushel	£. s. d. 0 10 0	£. s. d. 0 8 2	Straw . . per load	£. s. d. 1 5 0	£. s. d. 1 15 0
Maize . . ditto	0 8 6	{ None in the market	Bread . . per 4lb. loaf	0 1 0	0 0 10
Oats . . ditto	0 5 6	0 5 9	Beef . . per 14lb.	0 4 8	0 9 0
Barley . . ditto	0 6 6	0 6 4	Mutton . . ditto	0 4 2	0 8 2
Potatoes . per cwt.	0 10 0	0 5 0	Pork . . ditto	0 9 11	0 10 5
Butter, fresh . per lb.	0 2 6	0 2 4	Veal . . ditto	0 9 11	0 11 0
Butter, salt . ditto	0 1 6	0 1 10	Flour, fine . per 100lbs.	1 7 0	1 4 0
Eggs . . per dozen	0 2 0	0 2 0	Do. seconds . ditto	1 5 0	1 2 0
Ducks . . per pair	0 5 0	0 5 0	VEGETABLES.		
Fowls . . ditto	0 4 6	0 4 0	Carrots . . per bundle	0 0 2½	0 0 3
Geese . . ditto	0 9 0	0 11 0	Turnips . . ditto	0 0 2½	0 0 3
Turkeys . ditto	0 11 6	0 14 0	Cabbages . per head	0 0 1½	0 0 1
Hay . . per ton	17 0 0	7 10 0	Greens . . per bundle	0 0 2	0 0 2
			Green Peas . per peck	0 3 6	..

South Australia.

The first vessel with emigrants from the United Kingdom to this colony sailed on the 22nd February, 1836. Since that period 25 vessels,

with 2220 settlers, have been despatched thither; 941 in 1836, and 1279 in 1837: of these 1911 belonged to the labouring class, and 309 to a superior class; of the former, 816 were adult males, and 550 adult females; and of the latter, 166 were males, and 79 were female adults; the remaining 609 were children.

The expense of their conveyance was defrayed as follows:—

Emigrants of the labouring class:—	Males.	Females.	Total.
Adults conveyed by the Emigration Fund . . .	734	536	1,270
„ „ other means	82	14	96
Children conveyed partly by Emigration Fund, and partly by other means	74	53	127
Children conveyed, wholly, by other means . . .	98	85	183
„ „ under 2 years old, for whom no charge was made by the ship-owners	107	80	187
Children conveyed, for peculiar reasons, by the Emigration Fund	27	21	48
Emigrants of a superior class:—			
Adults conveyed by private means	166	79	245
Children „ „ „ . . . . .	..	..	64
Total			2,220

The recent accounts from the colony indicate that a further number of hands will be required. The Commissioners consequently propose to raise a land-loan of 50,000*l.*, in conformity with the South Australian Act, and to send out a considerable number of settlers of the labouring class during the ensuing year, if employment should continue to increase.

The sales of land, up to the present time, have amounted to 63,795 acres, for which 43,221*l.* have been received.

Canada.

From the report of the agent for the superintendence of emigrants in Upper and Lower Canada, it appears that the number of emigrants from the United Kingdom to that country had decreased last year, by 5827 individuals.

The following Statement shews the Number of Emigrants who arrived at Quebec in each Year from 1829 to 1837.

Countries whence arrived.	1829	1830	1831	1832	1833	1834	1835	1836	1837
England and Wales	3,565	6,799	10,343	17,481	5,198	6,799	3,047	12,183	5,580
Ireland	9,614	18,300	34,133	28,904	12,013	19,306	7,108	12,590	14,538
Scotland	2,643	2,450	5,364	5,500	4,196	4,591	2,127	2,234	1,509
Hamburgh and Gibraltar . . . . .	..	..	..	15	..	..	..	..	..
Nova Scotia, Newfoundland, } West Indies, &c. }	123	451	424	546	345	339	225	235	274
Havre-de-Grace . . . . .	..	..	..	..	..	..	..	485	..
	15,945	28,000	50,254	51,746	21,752	30,935	12,527	27,738	21,901

The total number during the nine years was 260,788.

The arrivals during 1837, took place between the 6th of May and 28th of October. The emigrants consisted of 11,740 males and 6079 females above 14 years of age, with 4052 children under that age.

The following Table exhibits the Principal Ports in the United Kingdom whence the Emigrants to Canada in 1837 sailed.

ENGLAND.		SCOTLAND.		IRELAND.	
Ports.	Number.	Ports.	Number.	Ports.	Number.
Bristol . . .	159	Aberdeen . .	252	Belfast . . .	1,999
Hull . . .	367	Cromarty . .	215	Baltimore . .	360
Liverpool . .	2,247	Greenock . .	698	Cork . . .	2,699
London . . .	987	Leith . . .	253	Dublin . . .	2,535
Lynn . . .	154	Other Ports .	91	Limerick . . .	1,055
Plymouth . .	403			Londonderry .	1,424
Portsmouth .	201			Newport . . .	378
Yarmouth . .	617			Newry . . .	282
Other Ports .	445			Sligo . . .	1,813
				Tralee . . .	286
				Waterford . .	859
				Other Ports .	848
Total . . .	5,580	Total . . .	1,509	Total . . .	14,538

The decrease this year in the number from England is 6608 individuals ; from Scotland 715. There has however been an increase from Ireland of 1942. During the past year, there has been no loss of life to the emigrant from shipwreck. The only vessels which met with this misfortune, having emigrants on board, were the *Royalist*, from Londonderry, with 136, and the *Hannibal*, from Newry, with 16 passengers. The former was run down at sea by the *Wexford*, off the island of St. Paul's, but succeeded in getting into Sydney in safety, and landing her passengers, who subsequently came up to Quebec in a schooner. The *Hannibal* was wrecked about 40 miles below Gaspé, at Griffin's Cove ; passengers and baggage all saved. The emigrants of this year arrived generally in good health, with the exception of the passengers in a few vessels ; nor has there been any disease of a malignant character amongst them after arrival. The number of deaths at the quarantine establishment of Grosse Isle, exhibited in the following statement, has been much smaller this season than during the last, in comparison with the number admitted into hospital :—

Number of cases admitted at the quarantine station, Grosse Isle . .	598
Deaths	57
Admissions at the Marine Hospital, Quebec	407
Deaths	35

The following is a detailed statement, as far as can be ascertained, of the several places to which the emigrants of 1837 proceeded for settlement and employment :—

City and district of Quebec	400
District of Three Rivers	300
District of St. Francis and E. Townships	1,500
City and District of Montreal	1,000
Ottawa District	800
Total to Lower Canada	4,000

Ottawa, Bathurst, Midland and Eastern Districts, as far as Kingston included : a portion of these are employed at the Long Sault Canal 3,000

District of Newcastle, and townships in the vicinity of the Bay of Quinté	1,800
Toronto and the Home District, including settlements round Lake Simco	2,000
Hamilton Gulf and Huron Tract, and situations adjacent	2,500
Niagara frontier and district, including the line of the Welland Canal, and round the head of Lake Ontario	2,000
Settlements bordering on Lake Erie, including the London District, Adelaide Settlement, and on to Lake St. Clair	5,000
Total to Upper Canada	16,300
Died at the Quarantine Station, Grosse Isle	57
Died at the Marine Hospital, Quebec	35
Gone to the United States	1,509
Total	21,901

With respect to a very important consideration in the condition of the emigrant population after landing on these shores, the agent reports, that, with the exception of the passengers in the few vessels alluded to in a previous paragraph, proper provision had, generally speaking, been made for them, as to pecuniary means and stores, previous to embarkation. Many wealthy and respectable settlers were amongst them, who have taken up locations in the vicinity of Toronto.

The number of persons of the working classes, aided in their emigration by parochial assistance or by their landlords, was 1571, a considerably smaller number than during 1836. Amongst these were 378 individuals who received aid towards their emigration under the direction and authority of the Poor Law Commissioners. The remaining 20,330 were voluntary emigrants.

The agent visited the Upper Province in the summer of last year, and found the condition of the emigrants generally satisfactory. Notwithstanding the check put to many public works and improvements, owing to the commercial pressure and financial embarrassment of the times, still the demand for labourers and artisans in Upper Canada generally, was sufficient to prove of the most material benefit to the emigrating population. And though the demand for labourers on the St. Lawrence improvements was considerably less than during last year, from 1200 to 1500 hands found constant employment there, with good wages. The government works at Kingston and Cornwall also furnished employment for a considerable number of labourers. Lastly, the very abundant harvest with which both provinces were favoured during the past season proved the means of affording ample employment to a very considerable portion of the emigrants.

With respect to the prospect of emigration during 1838, and the condition of these provinces for the reception of many thousands of the superabundant population of Great Britain and Ireland, the agent sees no reason, after the maturest consideration, to make a report in the smallest degree unfavourable. Great public improvements are still in progress in Upper Canada, or will be entered upon early in the spring, which will require and give employment to a large number of individuals. By a Minute of Council in Upper Canada, dated the 20th July last, a sum of money has been appropriated to the opening of a road through the back townships of Hinchinbrook, Bedford, Osso, and Olden, with instructions to locate thereon such able-bodied male emi-

grants of full age as may be willing to settle on any of those townships, on portions of fifty acres each, for which they will receive a free grant, besides further advantages, set forth in the Order in Council; and it is obvious that the formation of such settlements in the townships back of Kingston, with the opening of a road of communication between them, will afford a new stimulus to settlement in general, and an additional prospect of employment to persons arriving early in the ensuing season.

Connected with the Trent Canal in Upper Canada is the new district of Colborne, of which the Trent will, when completed, be the great outlet. A meeting was held last month at Peterborough, the intended capital of the new district, and a subscription was made to establish an efficient steam-boat on the large lakes and connecting rivers north of that town. This boat will be immediately commenced, and will prove of vast importance to all the back settlements in that section of the province, particularly the township of Ops, to which numbers of emigrants have been directed in former years, and the neighbouring townships of Harvey, Verulam, Fenelon, Eldon, &c.

During the summer several wealthy and highly respectable emigrants have established themselves in the eastern townships; and although the facilities for employment during the past season were not so extensive and favourable as might have been desired, still the emigrant population settled in that section of the country is gradually augmenting in number and prosperity. A large portion of them are persons possessing intelligence, knowledge of agriculture, and considerable capital.

The very rigid measures which the authorities of New York have adopted, with reference to emigrants arriving at that port from Europe, have proved a very considerable check to emigration to the United States, as will be seen from the subjoined statement. The number of arrivals in 1837 declined from 59,000 to 34,000, a decrease of 42 per cent. The vessels which recently brought out large numbers of emigrants from Liverpool to New York have on their last trip been almost empty of steerage passengers; and it is publicly stated, that the sole cause of this was the expressed resolution of the Mayor of New York to demand the full sum of 10 dollars a head from every individual. In addition to these measures, the commercial distress prevalent in that country, and the consequent difficulty of obtaining any employment whatever by the emigrant after arrival, has actually caused the return to Europe of a number of persons who would otherwise have become permanent settlers there.

A Return of the Number of Emigrants arrived at New York from the United Kingdom.

Years.	England.	Ireland.	Scotland.	Total.
1829	8,110	2,443	948	11,501
1830	16,350	3,499	1,584	21,433
1831	13,808	6,721	2,078	22,607
1832	18,947	6,050	3,286	28,283
1833	..	..	..	16,100
1834	..	..	..	26,548
1835	..	..	..	16,749
1836	..	..	..	59,075
1837	..	..	..	34,000

These measures will prove next season the means of diverting the greatest portion of the emigration which formerly proceeded to the interior by way of New York, and of inducing emigrants to prefer the more natural, cheaper, and equally expeditious route of the St. Lawrence.

Observations upon the Poorest Class of Operatives in Glasgow in 1837.

By C. R. BAIRD, Esq., Secretary of the Glasgow Statistical Society.

[*Read at a Meeting of that Society, on the 16th February, 1838.*]

OWING to the depressed state of trade, the consequent want of employment, and the high price of provisions, in the latter part of the spring and the beginning of the summer of 1837, a large number of the working classes in Glasgow were reduced to very necessitous circumstances. A public meeting was accordingly held in the Town Hall, on the 19th May of that year, when it was resolved that a subscription should be raised for the purpose of affording relief to the industrious poor, and a committee was appointed to procure subscriptions (which soon amounted to upwards of 5200*l.*, besides a balance of above 3000*l.* handed over by the former Relief Committee), and to administer such relief as they thought proper. The writer of the following observations acted as Secretary to the Committee.

After duly considering how their operations should be conducted, the Committee resolved,—1st, to employ, or to get employment, at out-door labour, for as many as possible of the persons who applied for relief; for instance, in banking the river Clyde, cutting foundations for buildings, breaking stone-metal, and similar work, in which department the Committee, through the kind exertions of Provost Mills, the River Trustees, and other gentlemen, were very successful; 2ndly, to give out yarn to be woven into webs by such applicants as were weavers, who either were incapable for out-door work, or for whom no such employment could be procured; and, 3rdly, to establish soup-kitchens, to provide food for applicants for whom no suitable work could be procured, and for destitute children. It was also agreed that each applicant for relief should give a statement of his case by answering the following queries, viz.—

- | | |
|------------------------------------|---|
| 1. Name. | 8. When dismissed, and for what. |
| 2. Age. | 9. If a Unionist. |
| 3. Place of nativity. | 10. Supply from other sources. |
| 4. Ditto of abode. | 11. If he (or she) had a wife (or husband). |
| 5. Length of residence in Glasgow. | 12. Number of children below 10 years. |
| 6. Occupation. | 13. Number of children above 10 years, |
| 7. By whom last employed. | and how occupied. |

This statement was required to be attested by the General or Resident Commissioner of Police of the ward within which the applicant resided; and the answers to queries 7 and 8 were also required to be certified by the applicant's last employer.

It will be at once observed that the queries 1, 2, 4, 6, and the last four, were necessarily put, in order to be able to judge of the propriety of granting relief; and it may be mentioned here that the queries 3 and 5 were made to satisfy several members of the committee, who wished

to know how many of the applicants were natives of Glasgow, and how long those who were not so had resided there, and the number of strangers relieved; that No. 7 and 8 were put to be able to learn farther particulars of the applicants, by applying to their last employers; and that the 9th query was inserted at the request of some of the members of the committee, in order to learn, as far as possible, the extent of Trades' Unions among the operatives, and to enquire how far such Unions tended to increase or diminish distress among these classes. The writer of these observations, as Secretary to the committee, wished to put additional queries, with the view to procure farther information respecting the general condition of the working classes; but it was thought better to put few questions, except those necessary to enable the committee to judge of the physical wants of the applicants.

When the cases of the applicants were attested, the committee got out-door labour for them, or employed them in preparing road-metal, or in weaving, or gave them tickets to receive food (soup and bread in proportion to the number of their families) at the soup-kitchens, of which there were eight in all, in different parts of the city and suburbs.

Above 6000 schedules of queries and answers, containing the statements of the cases of applicants, were lodged with the committee; besides which, many persons, adults and children, were supplied from the soup-kitchens, on certificates from respectable citizens, without having lodged statements of their cases, or answers to the queries. Indeed, at one time, there were on the soup-kitchen list alone upwards of 3800 adults, besides children, in all about 18,500 persons.

The writer has examined the statements (or schedules of queries and answers) of the cases of those male applicants, in all 3072, who were employed by, or got employment through, the committee, and 1000 of the cases of those adults who received food from the soup-kitchens. By such examination he has been able to prepare the subjoined tables, on which he proceeds to make the following remarks:—

TABLE I.—*A Statement of the Persons who were supplied with Work by the Glasgow Relief Committee in 1837.*

APPLICANTS.	Scotch.			Irish.	English.	Foreigners.	Total.
	Glasgow	Other Parts.	Total.				
Weavers, married . . .	753	440	1,193	948	23	7	2,171
,, single . . .	398	148	546	155	9	3	713
Total . . .	1,151	588	1,739	1,103	32	10	2,884
Other Trades, married .	50	45	95	..	7	..	102
,, single . . .	52	34	86	..	..	..	86
Total . . .	102	79	181	..	7	..	188
Total married . . .	803	485	1,288	948	30	7	2,273
,, unmarried . . .	450	182	632	155	9	3	799
Total . . .	1,253	667	1,920	1,103	39	10	3,072

TABLE I.—*continued.*

APPLICANTS.	Scotch.			Irish.	English.	Foreigners.	Total.
	Glasgow	Other Parts.	Total.				
Ages of Applicants:							
Below 30	607	227	834	304	17	3	1,158
30 to 50	497	265	762	532	15	6	1,315
Above 50	149	175	324	267	7	1	599
Total	1,253	667	1,920	1,103	39	10	3,072
Children of Applicants:							
Under 10 years of age	1,535	694	2,229	1,690	56	19	3,994
Above 10 „	702	542	1,244	1,020	39	3	2,306
Total	2,237	1,236	3,473	2,710	95	22	6,300
Unionists, and their ages:							
Below 30	259	123	382	176	8	..	566
30 to 50	284	149	433	302	10	1	746
Above 50	70	53	123	117	1	..	241
Total	613	325	938	595	19	1	1,553

TABLE II.—*A List of the Persons who were supplied with Food at the Soup-Kitchens.*

Males.		Females.		Total.	
Weavers	247	Weavers	45	1000	
Other trades	81	Other trades	627		
} 328		} 672			
Scotch—Glasgow	400	Ages—under 30	175	Unmarried	131
„ other parts	312	30 to 50	499	Married	475
Irish	266	Above 50	326	Widowed	394
English	18				
Foreigners	4				
<hr/>		<hr/>		<hr/>	
Total	1000	Total	1000	Total	1000

Number of children under 10, 1428; above 10, 706; independent of parents, 54; total, 2188.

Of the 3072 applicants who received work nearly two-thirds (as might indeed have been expected) were Scotchmen, the number of Scotch applicants being 1920, viz.—

Married men, weavers	1193	} 1288	} 1920
„ of other trades	95		
Single men, weavers	546	} 632	
„ of other trades	86		

The number of Irish applicants was 1103, viz.—

Married men, weavers	948	} 1103
Single men, „	155	

being rather more than one-third of the total number supplied with work, which may appear a large number to persons who are unacquainted with the working classes in Glasgow; but the statement of this fact will, the writer thinks, go far to disabuse the minds of many of the community of an idea too prevalent, that at least a majority (it has been repeatedly stated, two-thirds) of the persons relieved by charity in Glasgow are Irish.

The number of English applicants, it will be seen, was very small, only 39, viz.—

Married men, weavers	23	} 39
Single do. „	9	
Married do. of other trades	7	

And those of other countries only amounted to 10, viz.—

Married men, weavers	7	} 10
Single do. „	3	

It will be observed that the number of weavers of the said 3072 was to those of other trades as 15 to 1, there being of—

Weavers { married	2171	Other trades { married	102
{ single	713	{ single	86
	<hr/>		<hr/>
	2884		188

Which great surplus of weavers is partly to be accounted for by the fact that the fund was known to be raised especially for the hand-loom weavers; but at the same time the statement shews (as was known to be the case in former years, particularly in 1826) that during any depression in trade, or scarcity of provisions, the weavers are those who suffer first, and, it may be added, most severely; therefore they may well be accounted the poorest class of operatives in Glasgow.

It is rather a remarkable circumstance that all the Irish applicants were weavers, and were generally employed in heavy work; the Scotch being preferred for the lighter fabrics.

The writer has not been able to learn, with any degree of precision, the total number of hand-loom weavers in Glasgow and its suburbs, but has been informed by several persons, most likely to be acquainted with the truth, that there are about 8000. Of these it will be seen, by Table No. I., that the Relief Committee assisted (by giving work to) 2884; and by Table No. II. it appears that of 1000 persons who were supplied with food at the soup-kitchens, there were—

Female weavers	45	} 392
Male do.	247	

And taking the same proportion of the 2000 cases not examined, 784, it may be stated that at least 4060 of the adults assisted by the committee were weavers.

The writer has not thought it important to distinguish the particular trades of the 188 applicants supplied with work who were not weavers; but may merely mention that they were nearly all cloth-lappers, calenderers, and others closely connected with the manufacture of cotton cloth.

Of the 3072, the number of married men was 2273, viz.—

Married Men, Weavers, of the following Ages.	Married Men of other Trades.	Total of each Age.
Under 30	42	532
30 to 50	43	1199
Above 50	17	542
		<hr/>
	Total married	2273

The fact that so many as 532 of that number were married under 30 years of age (at what age—how much below 30—the writer has no opportunity of learning) goes far to shew the great improvidence of early marriages among the very poorest of the working-classes; and it will

also be noticed (from the number of children afterwards specified) that a large number of the applicants above 30 years of age must have been married at early periods of life. Indeed the writer can state, on the testimony of a manufacturer long in extensive business, that in no class is marriage, in general, so early as among the weavers.

The number of children was 6302, viz.—

	Children under 10 Years of Age.	Children above 10 Years of Age.	Total.
Of fathers under 30 . .	780	27	807
„ 30 to 50 . .	2686	1187	3873
„ above 50 . .	528	1094	1622
Total . .	3994	2308	6302

The average of this table gives nearly 3 children to each family; and taking the number of Scotch married applicants, 1288, and the number of their children, 3473, there are only 2·69 to each family; while the number of Irish applicants married, 948, and the number of their children, 2712, shew 2·86 to each family, establishing the current opinion, that the lower classes of the Irish are fully more prolific than the Scotch.

The writer did not expect to find so many Unionists among the weavers as is shewn in Table No. I., there being 1553 Unionists among the 3072 applicants. It is but fair, however, to state that the Union, or combination among the weavers, appears to have been of the most harmless description, merely, if possible, to get a general fixed rate of wages, and (so far as the writer has been able to learn) never productive of any of those acts of violence, or other great evils, which have characterised some Unions of other trades. On the other hand, it is proper to mention that the re-enactment of the combination laws is one of the measures proposed to benefit the hand-loom weavers, not merely with the view to keep down Unions among the weavers themselves, but more (as the writer supposes) to remove the obstacles, arising from combinations of other trades, to the weavers entering such trades.

After what has been mentioned in the previous parts of this paper, it is almost unnecessary to state that the great bulk of the weavers in Glasgow and its suburbs are in extreme poverty. Their wages, which even in 1819 were as low as 12s. gross, or 10s. 8d. nett (the deductions being for loom-rent, winding, &c.), now average only 8s. 4d. gross, or 7s. nett, per week; and even for this miserable pittance they are obliged to work from 14 to 16 hours per day. Their houses, which are generally in the suburbs, are of the poorest description, barely furnished, and the food and clothing of the inmates, as might be expected, not only of the plainest description, but also quite inadequate. In short, as is evident from the appearance of most of them, poverty and distress of nearly every kind “is their portion.”

From personal experience, as well as from the information of others intimately acquainted with the subject, the writer is able to state that the religious, moral, and intellectual condition of the weavers was long of a very high grade; and even yet the writer is of opinion that the elder portion of them rank higher in these respects than any other class of tradesmen. But as poverty prevents many of them from attending public worship, and still more from educating their children, there can be little doubt that their character is fast deteriorating, and that their children will be in a still more deplorable condition.

Before concluding, the writer may briefly state, without expressing any opinion upon, some of the causes which have been assigned for the distress now existing among the weavers. These are,—1st, competition, or the attempts among manufacturers to undersell each other, by which they have reduced the wages to the average above stated. 2nd. The state of the currency and banking system, which affords at one time undue facilities to over-trading, and again causes fatal revulsions in trade, and reduces wages below their natural level. 3rd. The Corn Laws, as keeping up the price of bread, by the exclusion of foreign corn, thus giving a monopoly to the land-owners, forcing the foreign capitalist to resort to manufactures instead of agriculture, seeing that our Corn Laws prevent an exchange of produce; enabling the foreign manufacturer, from the cheapness of food abroad, and its dearness in this country, to undersell the British manufacturer, and leading to a transfer of the cotton manufacture to America and the continent of Europe. 4th. Embezzlement of materials, particularly of worst. The manufacturers allege that worst is stolen by the weavers and winders, to an extent approaching to from 6 to 7 per cent., and is purchased at a cheap rate by “Bowl Corks,” who work it up into plain goods, which they can afford to sell at rates from 10 to 20 per cent. below the regular manufacturers, since they give lower wages to the weavers than those given by the regular houses. 5th. The superabundance of weavers (and this the writer deems the principal cause), ascribed to the influx of Irish and others into the trade, from the facility with which it is acquired; to the necessity the weavers are under to increase their incomes by putting their children early to the loom; to the effects of combinations, in keeping the weavers from entering into other trades; to the application of machinery to many fabrics formerly wrought at the hand-loom; and to the preference given by the weavers to their own trade, from their being more their own masters than they would be at other employments, and from being able to indulge their domestic habits by having their families more under their own eye than when employed at other trades.

The writer is incompetent to judge of the remedies which have been proposed to better the condition of the weavers: he may mention, however, that the following have been suggested, viz.—1st. The establishment of a Board of Trade, to fix a minimum rate of wages, and secure an equality over the whole kingdom. 2d. A repeal of the Act making Bank of England paper a legal tender. 3d. A repeal of, or at all events a change in, the Corn Laws. 4th. More severe enactments for the suppression of the “Bowl-worst” system. 5th. Emigration, so as to lessen the number of hands. 6th. The re-enactment of the combination laws (*vide supra*). 7th. An extension of the suffrage. 8th. The establishment of a fund to enable weavers to leave their own and learn some other trade, and to put their children to other trades. And, 9th. A greater number of clergymen and schools, so as to educate the people, make them more religious and moral, and consequently more industrious, prudent, and economical. And were the writer to venture an opinion on the subject, he would submit that the last remedy would be the most effective: it may be possible, by some of the other remedies proposed, to better the physical condition of the people for a time, but it is only by improving the moral man that any permanent amelioration can be effected.

10,062*l.*, the amount of voluntary contributions, and 1994*l.*, the income derived from local funds, which, it seems probable, although the returns are not quite clear upon this point, is applied to the support of the public schools, the total cost of the public schools will be 189,629*l.* 9*s.* 11*d.*; the average contribution by each individual of the population, 5*s.* 5*d.*; and the total cost of each scholar, 1*l.* 6*s.* 8*d.*

As a large portion of the private schools and academies are stated to be temporary schools, kept during the vacations of the public schools, it is consequently impossible to distinguish the private scholars from those already enumerated among the public scholars. The average number of pupils however, in each private school, is 32, and the average cost of each pupil, 2*l.* 10*s.* 1*d.*

The total sum applied annually to purposes of education in Massachusetts is 257,969*l.*; and the total cost of each scholar exactly 1*l.* 10*s.* 6*d.*

CRIMINAL RETURNS.

Forms for Registering the principal Circumstances connected with the Birth, Parentage, Education, and Condition of Criminal Offenders; the nature and probable Causes of their Offences, with the result of their Trial. Prepared by a Committee of the Statistical Society of London.

THE object of the Statistical Society, in propounding the accompanying Form of Criminal Registers, is to enable magistrates, clerks of assize, and gaolers, to obtain further particulars of offenders than have hitherto been collected.

The form is intended for the registration of individual cases brought before magistrates or courts.

The first column is for the "Number of the Offence," as entered in the book in the consecutive order of the charges made.

The second column, "Date of Charge before Magistrates," explains itself.

The third column, "Number of Offender," is to indicate the number of offenders in consecutive series, as distinguished from the number of offences.

The columns headed "Name," "Sex," "Age," require no explanation.

The column headed "Occupation" is subdivided into professed and actual, in order to exhibit the real as well as the professed or assumed occupation of an offender.

The column headed "Residence" is to be filled up with the name of the place which the magistrate, or other person making the return, considered to be the offender's last usual or ordinary place of abode.

The three following columns, headed "Domicile," are inserted in order to ascertain what proportion of offences are committed by natives, inhabitants, or strangers.

The column headed "Parentage" are chiefly applicable to juvenile offenders.

Those headed "Education," "Domestic Condition," "Previous Character," are so minute as to require no further explanation.

The column headed "Previously Convicted" could only be filled up

accurately, as to felonies or misdemeanours, by the clerk of the peace, &c.; but, as to petty offences, the magistrates, it is supposed, can generally identify the persons who repeatedly appear before them, and can briefly allude to the number and nature of their offences.

It is supposed, if nothing is stated to the contrary, that the offender is of sound mind; if he be not, the fact should be stated in the column for that purpose, distinguishing whether he be weak or insane.

The column headed "Date of Commission of the Offence" requires no explanation.

The "Specific Name of the Offence," as house-breaking, dog-stealing, ring-dropping, shop-lifting, is to be inserted in the column for that purpose.

The head, "Persons or Things on or in respect of whom, or which, the Offence was committed," is subdivided into two columns, namely, "Persons" and "Things," and the sub-head, "Things," is further subdivided into "Nature" and "Value."

In the column, "Persons," may be stated the sex, whether old or young, whether any relation to the offender, as father or child, as master or servant, &c.

In that headed "Nature of Things" may be inserted such particulars as the following: whether the property stolen, destroyed, or damaged, was food, wearing-apparel, tools, lead, glass, articles from carts or carriages, linen exposed to dry, and poultry.

In the column, "Modes," may be stated whether the offence was committed by force, as by breaking a door; by fraud, as false messages, &c.; by stealth, as entering when a door is left open, picking pockets, &c.

In the column, "Instruments," may be stated the weapon, &c. by which a bodily injury was inflicted, or a burglary effected, as false keys, &c., and so of other offences.

Under the head, "Inducements to commit the Offence," the ordinary causes are enumerated. If the inducement be unknown, or be of a nature different from those mentioned, it may be stated in the general column, "Other Inducements."

The division of "Desire of Gain" into profligacy and distress will, it is believed, include almost all the cases in which gain is the inducement; but if any other should occur, such as in the case of larcenies by persons to whom neither of those motives could be ascribed, it may be stated in the column, "Other Inducements."

The object of the next column, "Indulgence of Sexual Desire," will be frequently obtained by giving the specific name of the offence, as rape, &c.; but as gain and other motives may also influence the commission of bigamy, abduction, &c., it is desirable to exhibit the distinctive motive of each case.

"Malice" will, of course, include revenge, and all cases arising directly or indirectly from ill-will, as, for example, an injury inflicted on an animal to gratify malice borne towards its owner.

"Wantonness" will include cases of mischief in which malice towards a person is not the influencing motive, as wanton cruelty to animals, the love of excitement, &c.

Under the head "Proximate Causes of Offence" are columns for stating the circumstances, whether the offender or the person injured was intoxicated (a fact which it is of the highest importance to exhibit),

and whether the offender was tempted by opportunity, as by goods being exposed in an unguarded manner for sale; tools, &c., being left in unfinished houses; children being entrusted with valuables, &c.

In the next two columns, "Persons Charging," and "Witnesses," it may be stated whether the prosecutor is the party injured, or is an official, or a public or private informer; and the magistrate, for his own use, may fill up the columns with the names of the persons.

The head "Hearing and Examination" includes five sub-heads and eight columns, which are applicable to the cases brought before magistrates in their first preliminary stage.

The column headed "Cases not entertained, and why," is for entering those cases in which, for want of jurisdiction or other cause, the case is not entered upon.

The sub-head "Case amicably adjusted" has two columns, the first of which is for entering adjustments by the parties after the charge has been made, but before the hearing. The other is to include the cases in which the magistrate actively interferes, or tacitly acquiesces in an adjustment.

The next sub-head, "Cases discharged," has three columns, the objects of which are sufficiently described. The two last columns of this head are only applicable to cases which go to trial by jury.

The head "Trial, Summary or by Jury," contains columns most of which are applicable to both species of trial.

In the first should be stated the "Court or Jurisdiction" before which the cause was tried, viz., whether before a single magistrate, petty session, quarter session, or assize, &c.

To preserve a distinction which is always marked in the Scotch system of jurisprudence, namely, between cases which are considered to be false charges, and cases in which the legal amount of evidence to prove guilt is not adduced, the columns "False Charge" and "Case not proved" are introduced; a distinction which can be taken in summary convictions.

"False Charge" is meant to signify the innocence of the offender; but all verdicts of not guilty are to be entered in the column headed "Not Proved." "Culpability or Negligence of Complainant" is applicable to cases before magistrates dismissed on those grounds.

"Insanity of the Offender" is sufficiently intelligible. Under "Defect of the Law" may be registered the instances of cases of offence which, on trial, it is found that the law will not reach.

"Costs" are to be noticed in cases of fines, because their amount is often a considerable, though an indirect, portion of the punishment, and is generally taken into account in fixing the fine.

The term "Simple Imprisonment" is meant to distinguish imprisonment without whipping, hard labour, &c. which are to be noticed in their respective columns.

"Corporal Punishment" refers to such punishments as stocks, &c.

The other two columns in this head require no explanation.

The remaining columns are only applicable to cases tried by jury. The first will contain sentences respited by the judges, and the two next are to distinguish the execution and the commutation of punishments.

In the last column the date in which a free pardon is given may be inserted.

No. I.

NAME.		Sex.	Age.	OCCUPATION.		RESIDENCE.	Domicile.	Parentage.	Education.					
				Professed.	Actual.				Can read only.	Can read and write ill.	Can read and write well.	Has received a superior Education.	Instructed or not in the Doctrine of Future Rewards and Punishments.	Nature of Employment to which the Offender was brought up, if to any.
Number of Offences.		Date of Charge before Magistrate.		Number of Offenders.										

No. II.

Domestic Condition.		Previous Character.	Previously Convicted.	Whether of Weak Intellects or Insane.	Date of Commission of the Offence.	OFFENCE. Specific Name.	Persons.	Things Stolen, &c.		Modes or Instruments by means of which the Offence was committed.			Instruments.
Married or Single, Widower or Widow.	Whether living in illicit Cohabitation or not.							Legitimate.	Illegitimate.	Sober or Drunken.	Industrious or Idle.	Generally well-conducted or Violent.		Number and Nature of Offences, distinguishing Felonies, Misdemeanours, and Petty Offences.	Force.	Fraud or Stealth.	Unknown.

No. III.

Indisputable to commit the Offence.		Proximate Causes of Offence.				PERSONS CHARGING.		WITNESSES.		HEARING AND EXAMINATION.										
Desire of Gain.	From Profrigidity.	From Deceit.	Indulgence of Sexual Desire.	Malice.	Wantonness.	Other Inducements, and Nature thereof.	Intoxication.	Of the Party on whom the Offence was committed.		Tempting Opportunities.	Other Causes, and Nature thereof.	Case not entertained, and why.	Case satisfactorily adjusted.	Before Hearing.	At Interference of Magistrate.	As not amounting to an offence.	On Payment of Expenses, Amount thereof.	On Party's own Recognition, or on Bail.	Person committed for Trial.	Person held to Bail to appear and take Trial.

No. IV.

TRIAL SUMMARY, OR BY JURY.										Free Pardon, and Date thereof.														
Court or Jurisdiction before which tried.	Date of Trial.	Case not prosecuted.	Bill ignored.	False Charge.	Culpability or Negligence of Complainant.	Charge not proved.	Insanity of the Offender.	Defect of the Law.	Legal Technicalities.	Convicted—Nature of Sentence.														
										Acquitted, and Grounds thereof.					Corporal Punishment.					Transportation, Term thereof.	Death.			
										Amount thereof.	Amount of Costs.	In Default of Payment of Fine.	Slap.	With Hard Labour.	With Whipping.	With Solitary Confinement.								
																	Fine.	Imprisonment, with Term thereof.						
										Sentence respited.					Sentence executed.					Punishment commuted, Nature of Commutation.				

Earnings of Agricultural Labourers in Norfolk and Suffolk. From Returns prepared by JAMES PHILLIPS KAY, Esq., F.S.S., Assistant Poor-Law Commissioner.

IN proceeding to an inquiry respecting the annual income procured by agricultural labourers throughout Norfolk and Suffolk, the only means of satisfactorily determining this question appeared to consist in obtaining from as many farmers as possible an account of the income of the labourers in their own employment. This could not be accomplished with the necessary accuracy amongst the least skilful and intelligent farmers, because this class keep no accounts, and are not accustomed to that minute accuracy in details necessary to render the results valuable. Dr. Kay was therefore constrained to content himself with seeking the information which he desired to collect from a class of farmers which he knew to possess the requisite qualifications for making accurate replies. The returns are, therefore, to be considered as accumulated evidence of the average income of labourers employed by farmers of capital, and of more than an average degree of skill, scattered over the whole surface of Norfolk and Suffolk.

In order to procure these returns, Dr. Kay issued a circular with the following questions ; and 54 replies were received, prepared with great precision and care. In the replies to the circular, the circumstances of each labourer's family were separately enumerated, his name in each case being given.

Name ?

Age ?

Number of children under 10 years of age residing at home ?

Number of children above 10 residing at home ?

Annual amount of wages for day-labour ?

Annual amount of wages for task-work ?

Harvest wages ?

Annual amount of earnings of wife ?

Annual amount of earnings of children ?

Value of corn gleaned ?

Rent of house ?

Has he a garden or allotment, and, if so, of what size ?

Is he allowed to cut fuel free of charge ?

Has he any common right ?

Does he keep a pig or a donkey ; if so, has he any, and what, privileges, to enable him to feed his pig or donkey ?

Does he possess any other source of income, and if so, what is its annual value ?

The answers to these circulars furnished an account of 539 labourers' families, with sufficient accuracy to enable the results to be classified so as, first, to exhibit the average annual income of each class ; and, secondly, to divide that annual income into its elements, in all cases in which the returns are so accurate as to separate day wages, the earnings from task-work, harvest wages, the earnings of the wife, and the earnings of the children from each other, respectively.

1st Class.—Among the 539 labourers thus enumerated were 36 single men, whose average annual income amounted to £51.1s.4d. In 26 of these cases the

earnings obtained by day-work were specified, and the average annual amount was 18*l.* 10*s.* 6*d.*; in five cases the earnings obtained by task-work were specified, the average annual amount being 14*l.* 6*s.* 10*d.*; and in 27 the harvest wages were specified, and the average amount was 4*l.* 19*s.* 4½*d.*

2d Class.—In 64 families there were no children, or at least none residing at home; and the average annual income of the family was 30*l.* 12*s.* 10½*d.*

Nature of Earnings.	No. of Cases specified out of 64.	Average Annual Amount.
Day-work	58	£15 12 3½
Task-work	43	11 15 0
Harvest wages	55	5 1 1
Earnings of wife	34	3 8 9
Corn gleaned	46	0 17 10½

3d Class.—In 166 families the children were all under 10 years of age; the number of children was 475, or 2½ to each family, and the average annual income of the family 32*l.* 13*s.* 2*d.*

Nature of Earnings.	No. of Cases specified out of 166.	Average Annual Amount.
Day-work	143	£15 15 1½
Task-work	96	14 13 7½
Harvest wages	157	5 10 2
Earnings of wife	71	2 9 0½
„ of the children	25	2 4 0
Corn gleaned	110	0 18 7½

4th Class.—120 families had one child more than 10 years old, and the average annual income amounted to 35*l.* 9*s.* 0½*d.* The number of children averaged about 3½ to a family.

Nature of Earnings.	No. of Cases specified out of 120.	Average Annual Amount.
Day-work	108	£15 13 11½
Task-work	90	13 17 1½
Harvest wages	113	5 5 10½
Earnings of wife	64	2 11 7½
„ of the children	76	4 6 1½
Corn gleaned	97	1 0 6½

5th Class.—92 families had 2 children above 10 years of age, with an average annual income of 40*l.* 10*s.* 1*d.* The number of children averaged 4½ to a family.

Nature of Earnings.	No. of Cases specified out of 92.	Average Annual Amount.
Day-work	84	£12 14 6½
Task-work	75	14 18 0
Harvest wages	89	5 11 2½
Earnings of wife	49	2 5 7½
„ of the children	82	8 17 4½
Corn gleaned	85	1 5 6½

6th Class.—44 families had 3 children above 10, with an average annual income of 45*l.* 11*s.* 9½*d.* The number of children averaged about 5½ to a family.

Nature of Earnings.	No. of Cases specified out of 44.	Average Annual Amount.
Day-work	40	£13 16 9
Task-work	31	17 10 10
Harvest wages	43	5 11 4½
Earnings of wife	20	2 19 1
„ of the children	41	12 17 0
Corn gleaned	37	1 9 6½

7th Class.—15 families had 4 children above 10, with an average annual income of 50*l.* 18*s.* 6*d.* The number of children averaged about 7 to a family.

Nature of Earnings.	No. of Cases specified out of 15.	Average Annual Amount.
Day-work	14	£20 2 6½
Task-work	9	12 13 0½
Harvest wages	15	5 9 0½
Earnings of wife	3	2 3 10
„ of the children	13	20 3 8½
Corn gleaned	13	1 6 9½

8th Class.—One family had 5 children above 10 years old, with an annual income of 42*l.* 13*s.*, composed of the following elements:—The earnings obtained by day-work was 14*l.* 6*s.*; by task-work 10*l.* 6*s.*; by harvest 6*l.* 5*s.*; by children 10*l.* 6*s.*; and the value of corn gleaned 1*l.* 10*s.*—Total 42*l.* 13*s.*

9th Class.—One family had 6 children above 10, with an annual income of 52*l.*, composed of the following elements:—The earnings obtained by day-work was 28*l.*; by harvest 6*l.*; by children 18*l.*—Total 52*l.*

In 449 cases the rents were stated, and they amounted to 1602*l.* 14*s.* 6*d.*, being on the average 3*l.* 11*s.* 4½*d.*

Among the 539 cases enumerated, 397 families had gardens; in 277 instances in which the size of the gardens was stated, the aggregate amount was 5463 rods, averaging 19½ rods. Of 64 allotments enumerated, the average size is 52½ rods. 136 of these families had some fuel free of charge; 259 had a pig; 20 a donkey.

The following abstracts and calculations will place some of the principal facts in a more prominent point of view.

Classification of the Earnings of the 539 Families.

Families.	Average No. of Children to a Family.	Average Annual Income.
36 Single men . . . . .	..	£25 1 4½
64 with no children at home . . . . .	..	30 12 10½
166 with all the children under 10 years old	2½	32 13 2
120 „ one child above 10 years old	3½	35 9 0½
92 „ two children „ „	4½	40 10 1
41 „ three „ „	5½	45 11 9½
15 „ four „ „	7	50 18 6
1 „ five „ „	..	42 13 0
1 „ six „ „	..	52 0 0
<hr/> Total 539	Total Annual Income of all . .	£19,129 16 5
<hr/>	Average „ of each . .	35 10 0

The number of cases, out of the 539, in which the earnings of the male heads of families obtained by day-work were specified, was 475; the total annual earnings from this source was 7382*l.* 5*s.* 2*d.*, and the average earnings of each man was 15*l.* 10*s.* 10*d.* a year, or within a fraction of 6*s.* a week. The number of similar cases in which the earnings by task-work was specified was 350; the total amount earned was 5018*l.* 17*s.* 7*d.*, and the average earnings of each man was 14*l.* 6*s.* 10*d.* a year, or 5*s.* 6*d.* a week. If to this were added the earnings by day-work in the 286 cases in which, at least, the labourer obtained earnings in both manners, the amount would be 29*l.* 17*s.* 8*d.* a year, or 11*s.* 6*d.* a week; but this is much too high, which arises from these averages including those cases in which the labourers' earnings were derived from one source alone, whence the average becomes raised in a considerable degree, though the

exact proportion cannot be stated. By another calculation, at the close of this paper, the average earnings of the men are estimated at 7s. 3d. a week.

The next point to be noticed in the above statements is the harvest wages. In 499 out of 539 cases, the average amount is specified: the total amount, calculated from this, would be 2691l. 9s. 10d., and the average of each man 5l. 8s.

The average earnings of the wives were as follows:—

		Average No. of Children in a Family.	Average Annual Earnings.
34 cases in which there were no children	.	..	£3 8 9
71 ,, all the children were under 10	2 $\frac{1}{2}$		2 9 0 $\frac{1}{2}$
64 ,, one child was above 10	3 $\frac{1}{2}$		2 11 7 $\frac{1}{2}$
49 ,, two children were	4 $\frac{1}{2}$		2 5 7 $\frac{1}{2}$
20 ,, three	5 $\frac{1}{2}$		2 19 1
3 ,, four	7		2 3 10
<hr/> Total 241			
Total Annual Earnings of all			£633 13 7
<hr/> Average			2 12 7

The above table shews that the earnings of the wife of a labouring man without children are exactly one-third greater than those of women with children; but that the number of children does not seem to affect the amount of earnings in any remarkable degree.

The earnings of the children is an important point for consideration.

		Average No. in each Family.	Average Annual Earnings.
25 cases	in which all were under 10	2 $\frac{1}{2}$	£2 4 0
76	,, one child was above 10	3 $\frac{1}{2}$	4 6 1 $\frac{1}{2}$
89	,, two children were	4 $\frac{1}{2}$	8 17 4 $\frac{1}{2}$
41	,, three	5 $\frac{1}{2}$	12 17 0
13	,, four	7	20 3 8 $\frac{1}{2}$
1	,, five	..	10 6 0
1	,, six	..	18 0 0
<hr/> Total 239			
Total Annual Earnings of all . .			£1933 11 5
Average ,, of each family			8 1 11
,, ,, child			1 17 1

The ages of the children are not given, neither the number in each family in employment, nor the nature of their employment; but the above table will serve to shew the progressive influence of the increased number and advanced age of the children on the incomes of the families*.

* As the statements of the average number of children in a family refer to the whole number of families in each class, and not to the number in which the earnings of the children are quoted, the average of the latter may be somewhat different from that of the former; but this circumstance, as it will affect all classes equally, will not invalidate the following calculation:—

The Average No. of Children was	In the Families in which And the No. of Children above 10 was	The Average Earnings of each Child was
2 $\frac{1}{2}$	None	£0 15 3 $\frac{1}{2}$
3 $\frac{1}{2}$	One	1 1 9 $\frac{1}{2}$
4 $\frac{1}{2}$	Two	1 13 0
5 $\frac{1}{2}$	Three	2 2 5 $\frac{1}{2}$
7	Four	2 17 8

There remains only one other source of income to be noticed, viz., the value of corn gleaned; and here, also, as was to be expected, the amount increases with the number of children, but as the age of the latter does not much affect their ability to glean, the increase is very gradual and of small amount; and, in the class in which four out of seven children are above 10 years of age, the average earnings under this head fall off considerably, owing, it is probable, to the permanent employment of the elder children in some other manner, which is confirmed by the very high earnings of the children in this class.

Value of Corn Gleaned.

In Cases of Families.	Average No. Children in a Family.	Average Annual Amount.
46 with no children . . . . .	..	£0 17 10½
110 ,, all the children under 10	2½	0 18 7½
97 ,, one child above 10	3½	1 0 6½
85 ,, two children ,,	4½	1 5 6½
37 ,, three ,, ,,	5½	1 9 6½
13 ,, four ,, ,,	7	1 6 9½
<hr/> Total 388		
Total Earnings of all . £423 12 0		
Average ,, of each		1 1 10

It is difficult from the returns before us to deduce, in an accurate manner, the proportion of income arising from each of the sources noticed; but if the first class of labourers, consisting of single men, be excluded from the calculation, the average income of each of the remaining families will be 36*l.* 4*s.*

The average harvest-wages are	£5 8 0
,, earnings of wives are	2 12 7
,, ,, of children are	8 1 11
,, value of gleanings is .	1 1 10
	<hr/> 17 4 4

Leaving a remainder of £18 19 8 as the earnings of the husband for the year, which is equal to a weekly rate of 7*s.* 3*d.*

A List of Statistical Papers printed by the Houses of Parliament during the present Session of 1837-8. (To be continued Monthly.)

No.

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- 12 Abolition of Slavery—Papers explaining Measures of Government
- 15 Negro Education—Application of Parliamentary Grants, 1835-36
- 24 Churches and Schools, Jamaica—Expenditure on account of, 1832-36
- 26, 36, 66 Commissioners of Compensation—Expenses of
- 31, 40 Slavery Abolition Act—Claims not awarded
- 33 Court of Chancery—Sums received and paid as Salaries
- 39 Court of Chancery—Reduction of Fees
- 42 Lower Canada—Expenses of Civil Government and Administration of Justice; Revenues of the 14th Geo. III. cap. 88, 1832-36
- 44 Lower Canada—Census, Population, and Houses, 1831
- 45 Lower Canada—Acts expired and to expire, 1835-39
- 47 Masters in Chancery—Rates and Amount of Charges and Fees
- 49 British North American Colonies—Imports from and Exports to, 1827-36
- 50 British North American Colonies—Duties on Produce of
- 51 Court of Bankruptcy—Expenses and Amount of Fund
- 52 British North American Colonies—Revenue from Taxes, 1832-36
- 67 British North American Colonies—Shipping belonging to and Trading with, 1832-36

- No.
 70 Jamaica—Exports of Produce, 1772 to 1836
 73 Slave Vessels Captured—Value of, and Bounty on, Slaves, 1830-37
 83, &c. Bankruptcy—Debts Stated and Collected under each Fiat
 86 Juvenile Offenders—Number Confined in Milbank Penitentiary, 1831-37
 94 British North American Colonies—Colonial and Foreign Trade, 1832-36
 98 Jamaica Apprentices—Number who have Purchased Freedom, Sum paid
 104 Yeomanry—Strength of each Corps Retained and Disbanded
 110 British North American Colonies—Charges on United Kingdom, 1827-37
 111 Clergy in Canada—Name and Salary of each
 116 Constabulary, Ireland—Number in each County, 1828-38
 119 Outrages, Ireland—In November and December, 1835-6-7
 120 Military in Ireland—Force, 1828-37
 122 Outrages, Rewards, and Criminal Returns, Ireland, 1836-38
 142 Clergy Reserves, Canada—Proceeds and Interest on
 144 Slave Vessels Captured—Description of each, 1831-37
 145 Slave Vessels Captured—Number of Slaves in, 1828-37
 146 Committals, Ireland—Annual Returns, 1837
 148 Flax from New Zealand—Imports, 1833-37
 156 Murders and Homicides—In England and Ireland, 1827-37
 184 Ecclesiastical Commission, Ireland—Receipts, Expenses, Fund, &c., 1838
 18, 23, 27, 63, 64, 71, 89, 92, 93, 99, 100, 128, 149, 176, and 178 The same as
 Papers printed by the House of Commons

HOUSE OF COMMONS.

- No.
 3 Hereditary Revenues of the Crown and Civil List, 1762 to 1837
 4 Tithe Commissioners—Annual Report of, 1837
 22 Civil List—Report on, Nature and Amount of Expenditure, 1831-36
 28 Royal Parks and Gardens—Annual Expense of each
 35 Greenwich Hospital—Freight-Money received by, 1819-37
 51 East India Company—Finance Accounts, 1832-3-4-5
 53 Ecclesiastical Commission, Ireland—Annual Report, 1837
 62 Newspaper Stamps—Gross and Net Amount of Duty, 1835-37
 63 Timber Drawback—Amount paid, 1811-37
 64 Slaves—Averages of Sales, and Rate of Compensation, in each Colony
 73, 368 Newspapers—Number of Stamps issued to each, 9 Months, 1837-8
 74 Parliamentary Papers—Number Issued and Sold, Amount of Sales, 1833-37
 76, 224, 448 Yeomanry Corps—Strength and Expense of each, 1836-7
 78 Steam Vessels—Description of each belonging to Foreign Ports
 87 Newspapers—Number Posted Monthly, 1835-37
 88 Shipping Entered Docks—Liverpool, London, St. Katherine's, and West India, 1837
 89 Northern Lighthouses—Number, Expenses, Dues of each, 1833-36
 90 River Weaver and Westow Canal—Receipts and Expenditure, 1795 to 1836-7
 92 Bank of England—Advances to Government and Repayments, 1837
 93 National Debt—Sums Received and Expended by Commissioners, 1837
 97 South Australia—Second Report of Colonization Commissioners, 1837
 101 Navy Estimates—For the Year 1838-9
 102 Army Estimates—For the Year 1838-9
 104 Russian Dutch Loan—Sums Paid, Balance Due, 1837
 109 Revenues of India—Bills Drawn, Remittances, 1836-38
 110 Naval Receipt and Expenditure—Year ending 31st March, 1837
 113 Negro Education, Jamaica—Report of Commissioner, 1837
 116 Public Monuments—Expense of each in Westminster Abbey and St. Paul's
 120 Factory Act—Prosecutions for Offences against, 1837
 121 Court of Session, Scotland—Causes Instituted, &c., 1837
 122 New Zealand—Trade of Bay of Islands, Resident's Report on Condition, &c. of the Natives
 123 Ordnance Estimates—For the Year 1838-9
 124 Prisoners for Trial—In each Gaol in November, 1837
 136, &c. Poor-Law Amendment Act—Thirty-nine Reports of Select Committee on, 1838
 137 Tithe Commutation—Notices and Agreements, 6 Months, 1837

- No.
 139 Bankruptcy Court—Account of Fund, Salaries and Payments
 141 Malta—Reports of Commissioners on Affairs of, 1836-7
 142 Ecclesiastical Commission, Ireland—Salaries, Perpetuity Purchase Fund
 143 Metropolitan Police and Patrol—Receipts and Disbursements, 1837
 154 Abolition of Slavery—Papers explaining Measures of Government
 157, 214 Outrages, Ireland—Rewards, Offences in each Month, 1836-38
 158 Corn and Seeds—Imports into London, Allowances of Duty
 159 Insurances—Fire, Stamp Duty Paid by each Office, Life and Marine, 1837
 162 Coroners—Number in each County, Elections since 1800
 165 Navy—Mates, Midshipmen, and Volunteers Serving, January, 1838
 168 Appeals (Quarter Sessions)—Number in each County, 1836
 169 Gaol Returns—Annual Report from each Gaol, 1837
 170 Convicts—Annual Report of Superintendent, 1837
 171 Sheriffs' Courts, Scotland—Sittings, Causes, Salaries, &c., 1834-36
 177 Wheat and Oats, Ireland—Average Annual Prices, 1824-37
 178 Court of Exchequer, Scotland—Number of Trials, &c., 1833-36
 184 Beer Houses—Number of Licenses Granted, 1837
 185 Criminal Offenders, Scotland—Annual Tables, 1837
 186 Prisons, Ireland—Report of Inspectors, and Criminal Tables, 1837
 188 Trade and Navigation—Annual Returns, 1836-7
 199 Savings' Banks—Surplus Funds standing to Credit of each, February, 1838
 200, 466 Slave Vessels—Number Captured, 1836-7
 203 Post Office Steam Packets—Rates, Fares, Establishments
 206 East India Company—Assets Realized, Applied, and Due
 207 Grand Jury Presentments, Ireland—Abstracts of Accounts, 1837
 208 Committals, Ireland—Number in each Gaol, 1837
 209, 440 Rating of Tenements—First and Second Reports of Select Committee
 213, 393 'Tithes' Commutation—Agreements, Composition, Rent-charge, and Difference
 215 Slave Compensation Claims—Amount of each, Sums not Awarded, Expenses of Commission, Number and Average Value, Rate and Amount of Compensation
 217 Bricks—Number Charged, Amount of Duty, 1836-7
 218 General Penitentiary, Milbank—Annual Report, 1837
 223 Soap—Quantities Made, Imports and Exports, Allowances, &c., 1837
 230 British Museum—Annual Account, Receipts, Expenditure, and Visitors, 1837
 235 Highland Roads and Bridges—Annual Report of Commissioners, 1837
 236 Poor-Law Unions—Population and Size of each, Number of Guardians
 239 Bankrupt Commissions and Fiats—Number Issued and Opened, 1832-37
 241 Public Offices—Increase and Decrease of Salaries, 1837
 242 Public Offices—Superannuations Granted or Ceased, 1837
 243 Public Debt—Annual Addition, Provision for Charge, 1829-37
 244 Savings' Banks—Annuities, Sums received from, Prices of Investment, Sums Due to, and in hand, 1837
 247 Yeomanry—Corps before and after 1827 and 1837
 253 Tithes, Ireland—Commitments, Decrees, and Writs for Recovery, 1831-37
 254 Factories—Number, Duty, and Salaries, of Superintendents
 257 Railroads—First Report of Select Committee
 265 Post Office—Abstract of Commissioners' Reports; Money Letters Abstracted
 266 Clergy, Ireland—Portion Repaid of 1,000,000*l.* voted to
 268 Sheriffs and Sub-Sheriffs, Ireland—Amount and Sources of Income of each
 304 Insane Persons—List of Houses for Reception of, 1835-37
 305 Military Punishments—Royal Marines, Number Punished, 1836-7
 306 Savings' Banks—Sums Received from, Paid, and Due to
 307 Newspapers—Number, Stamps Issued, Duty, 1836-38
 308 National Vaccine Establishment—Annual Report, 1837
 309 Convict Discipline, Van Diemen's Land—Report and Papers
 310 to 318 Miscellaneous Estimates—For the Year 1838-9
 320 Pluralities—Number of Clergymen holding, Amount of Income
 321 Hops, Malt, and Brewers—Growth, Produce, Consumption, Licenses, &c.
 322 Glass—Amount of Duty and Drawback, 1837
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 324, 404 Spain—Nature and Value of Military Stores, &c. Furnished to Queen of

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 325 Church Building Materials—Drawback Allowed on, 1817-37
 326 Justices of Peace, Middlesex—Appointments in the Gift of
 329 Electors—Number Registered and Polled in each County and Borough, 1836-7
 330 Lunatic Asylums, Ireland—Patients, Expenses, Salaries, 1837
 339 Municipal Boroughs and Cities—Commissions of the Peace, &c.
 340 Wool and Woollen Manufactures—Imports and Exports, 1837
 341 Lead and Lead Ore—Imports and Exports, 1837
 342 Copper and Tin—Imports and Exports, 1837
 343 Linen and Linen Yarn—Exports, 1833-37
 344 Coals, Cinders, and Culm—Shipments and Exports, 1836-7
 345 Corn and Flour—Imports from Channel Islands, 1837
 346 Commissions—Account of each since 1830
 347 Municipal Boundaries' Commission, Expense of
 350 Coronation Expenses—Of Geo. IV. and Will. IV.
 352 { Exchequer Bills—Outstanding, Issued, &c., 1808-37
 Bank of England—Returns to Stamp Office, Liabilities and Assets, 1835-37
 355 Public Revenue—Exchequer Receipts and Payments, 1836-7
 361 Army—Commissaries' Accounts of Receipts and Payments, 1836-7
 369 Wine—Imports, Exports, Consumption, 1835-37
 370 Public Income and Expenditure—Abstract of 1837-8
 371 Corporal Punishments—Number Inflicted in Navy, 1834-37
 383 Constabulary, Ireland—Force, Salaries, Expense, 1838
 386 Wills—Suits about Validity, 1827-37; Probates, 1834-36
 388 Emigration—Report from Agent-General for Emigration, 1837
 389 Emigration, in Canada and Australia—Reports and Papers
 394 West Indies and Mauritius—Imports from, 1837
 396 Soap and Candles—Licenses for Manufacture of, 1827-36
 397 Revising Barristers—Number, Time Employed, Cost, 1836-37
 398 Fire Insurances—Duty Paid by each Office, Farming Stock Insured, 1837
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 458 Silk Goods—Imports and Exports of Foreign Drawback; on British
 473 Merchant Seamen—Number Registered, June, 1838

PRESENTED BY COMMAND OF HER MAJESTY.

- Criminal Offenders, England—Annual Tables, 1837
 Religious Instruction, Scotland—Third and Fourth Reports of Commissioners
 National Education, Ireland—Fourth Report of Commissioners
 Poor Laws, Ireland—Second Report of Commissioner, Mr. Nicholls
 Poor Laws, Ireland—Third Report of Commissioner, Mr. Nicholls, on Poor in
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 Inspectors of Factories—Annual Reports, 1837
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 Inspectors of Prisons—Third Report (England), Northern and Eastern District
 Inspectors of Prisons—Third Report (England), Southern and Western District
 Aberdeen University—First Report of Commissioners
 Prison Discipline, Van Diemen's Land—Maconochie's Report
 Tithes, England—Annual Report of Commissioners, 1837
 River Shannon Navigation—Second Report of Commissioners

CORONATION EXPENSES.

An Abstract of the Account of the Expenses of the Coronations of George the Fourth and of William the Fourth.

GEORGE THE FOURTH.		£.	s.	d.
Lord Steward, Expenses attending the Banquet		25,184	9	8
Lord Chamberlain, for the Furniture and Decorations of Westminster Abbey and Westminster Hall; for providing the Regalia; for Dresses, &c. of the Persons attending and performing various duties		111,880	3	2
Master of the Horse, for the Charger for the Champion		118	18	6
Master of the Robes, for His Majesty's Robes, &c.		24,704	8	10
Surveyor General of Works, for fitting up Westminster Abbey and Westminster Hall, Platforms, &c.		52,095	6	9
W. D. Fellowes, Esq., Secretary to His Majesty's Great Chamberlain, for Expenses incurred		2,500	0	0
Hire of the Theatres		3,504	15	0
Master of the Mint, for Medals		4,770	5	4
Sir G. Naylor, for Expenses in the Earl Marshal's department		5,216	15	0
Sir George Naylor, towards the publication of the Account of the Ceremony		3,000	0	0
Deputy Earl Marshal, usual Fee		800	0	0
Sir R. Baker, Expense of Police		981	18	10
Sir T. Tyrwhitt, for Messengers and Door-keepers, House of Lords		173	2	6
Messrs. Rundell and Bridge, for Snuff-boxes for Foreign Ministers		8,205	15	0
Earl of Kinnoul, on account of Pursuivants and Heralds in Scotland		254	7	7
Total		£243,390	6	2

This Sum exceeds the Amount stated in the Account presented to Parliament on the 27th of May, 1823, by 5,162*l.* 6*s.* 2*d.*, the amount of the Claims alluded to in that Account as then remaining unsettled.

Expenses how defrayed:—

Paid out of the sum voted by Parliament, Session 1820	100,000	0	0
Paid out of the money received from France on account of pecuniary Indemnity under Treaty, anno 1815	143,390	6	2
Total	£243,390	6	2

WILLIAM THE FOURTH.				
In the several departments of their Majesties' Households	22,234	10	3	
By the Office of Arms, for the King's Heralds and Pursuivants	1,478	3	9	
In the Office of Works, for fitting up the Abbey, &c.	12,085	14	5	
* In the Mint, for Coronation Medals	4,326	4	6	
The Amount expended for Fire-works, and for keeping open the public Theatres on the night of the Coronation	3,034	18	7	
	£43,159	11	6	

* Since this Account was returned to Parliament, in 1832, there has been received from the Mint for Money produced by the sale of Medals

861 7 9

Net Expense £42,298 3 9

The whole of this Expense was defrayed from the Sum of £50,000 voted by Parliament in 1831.

There are no documents from which a correct Account could be prepared of the Expenses attending the Coronation of George the Third; and no Estimate can yet be prepared of the probable Expense of the approaching Coronation of Queen Victoria.

WATERLOO FUND.

The following is a statement of the management and distribution of the Waterloo Fund, for the relief and benefit of the sufferers from the battle of Waterloo, which was raised by public subscription, commenced at a meeting of merchants, bankers, traders, and others, of the city of London, convened by advertisement, on the 29th June, 1815, and ultimately extended throughout the United Kingdom and its dependencies. A committee was nominated at that meeting, who, with their successors, have gratuitously managed the distribution of the fund to the present time :—

Receipts.

	£.	s.	d.
Total amount of subscriptions	489,006	15	10
Dividends on stock, interest on Exchequer bills, and profit on stock sold	217,910	0	7
Income from "Annuities for Life" and "Deferred Annuities"	254,571	0	0
Total receipts	£961,387	16	5

Payments.

Annuities and donations to the British troops and King's German Legion	652,863	3	2
to foreign troops	62,500	0	0
Cost of "Annuities for Life" and "Deferred Annuities," purchased from the Commissioners for the Reduction of the National Debt	194,107	5	1
	909,470	8	3

Expenses of the Committee.

Advertising, printing, and stationery	£5,919	7	6
Stamps, payment of annuities, and postages	4,244	14	8
Office, and salaries to Secretary and Clerks, } 22½ years	27,122	15	7
	37,286	17	9
	946,757	6	0
Balance at Bankers', Exchequer bills . £13,300 0 0 cost	13,411	18	9
Cash at ditto	1,218	11	8
Total	£961,387	16	5

Appropriation.

The following provisions have been made in respect of the British troops and the King's German Legion :—

Annuities for life—

- For 53 widows, &c., of officers of various ranks killed.
- ,, 694 widows of non-commissioned officers and privates killed.
- ,, 282 disabled non-commissioned officers and privates.

Temporary annuities, and donations at the cessation of them, or donations only, as the case required.

- For 105 children of officers killed.
- ,, 881 ,, non-commissioned officers and privates killed.

Donations (in cases in which there was neither widow nor child) to the parents and other near or dependent relatives—

- Of 226 officers and non-commissioned officers killed.
- ,, 1033 privates killed.

Donations, proportioned to the severity of the case, as certified.

To 1288 officers and non-commissioned officers wounded.
 ,, 4799 privates wounded.

In May, 1836, the annuities amounted to about £8,700, and were payable to about 700 persons, aged from 37 to 79 years. The surviving members of the Committee are desirous of transferring the accounts of the trust to the Commissioners for the Reduction of the National Debt, and a Bill is now before Parliament for that purpose.

PROCEEDINGS OF STATISTICAL SOCIETIES.

STATISTICAL SOCIETY OF LONDON.

The last Ordinary Monthly Meeting of the present Session was held on Monday, June 18th, and was very numerously attended. The Earl FITZWILLIAM, President, in the Chair.

The following Gentlemen were balloted for, and were elected Fellows of the Society:—

The Right Rev. the Lord Bishop of Durham; Samson Ricardo, Esq., Upper Eccleston-street, Belgrave-square; Charles Wykeham Martin, Esq., of Leeds Castle, Kent; George Lillie Craik, Esq., Brompton.

Letters were read from Baron de Humboldt and Dr. Julius, of Ham-burgh, acknowledging the receipt of their Diplomas appointing them Foreign Members of the Society.

The first paper read was "On the Sickness and Mortality among the Troops in the West Indies," by Capt. A. M. Tulloch (see page 129).

A paper was then read "On the rate of Mortality amongst Officers retired from the East Indian Army," by Robert Christie, Esq., which will appear in a future number of the Journal.

The following twelve Gentlemen were proposed as Candidates for admission into the Society:—

Lord James Stuart, M.P.; Sir Joseph de Courcy Laffan, Bart.; Lieut.-General William Thornton; The Rev. Dr. Dillon; The Rev. T. Ormerod; Robert George Cecil Fane, Esq.; Hugh Wood, Esq.; Alexander Robertson, Esq.; William Trail, Esq.; John Cameron, Esq.; Samuel G. Hall, Esq.; Thomas Bartrum, Esq.

ROYAL POLYTECHNIC SOCIETY.

In noticing in our last Number the formation of the Geological and Polytechnic Society of the West Riding of Yorkshire, we took occasion to advert to the advantages which it will possess for collecting Statistics of the district in which it is established. We now take the opportunity of pointing out what has been done by a kindred Society—the Royal Polytechnic Society of Cornwall—and of recommending to the Members of the former the adoption of a similar course.

Extract from the Annual Report of the ROYAL CORNWALL POLYTECHNIC SOCIETY for the year 1837.

"Prizes will in future be given, as resolved during the past year, to statistical essays—a point to which attention has been specially directed by your President, Sir Charles Lemon, who has offered a premium on

the same subject*. Such a measure may be confidently left to stand on its own merits. If 'the proper study of mankind be man,' the value of statistical information can no longer be doubted. It stimulates the benevolence, and gives aim and effect to the energies, of the philanthropist; it furnishes the legislator with materials on which to found remedial measures for social derangement, and plans for increasing the mass of social happiness; and though its conclusions often consist in a bare numerical statement of aggregate results, yet they come home with all the authority of stubborn facts, and often tell more than the most elaborate moral appeal. From information thus furnished, it cannot be questioned that the public attention has been fastened, with an intensity never before given to the subject, upon the physical and moral degradation of the poorer classes in the metropolis and many of our large towns. The appeal thus made has been nobly responded to; the dry facts have been interpreted; and means have been adopted for carrying the blessings of education, order, and virtue into those dark recesses where ignorance, vice, and misrule appeared to have fortified themselves in impenetrable obscurity. It shall be no unworthy object of your Society to take a part, however humble, in furthering investigations which help to solve problems of deep social and economical importance; which instruct and interest us in the physical and moral condition of our fellow-men; which point out the fulcrum on which to rest the lever in our endeavours to remove the mass of sin and misery which depresses so large a portion of our species; and which thus enable us to associate more immediately scientific and intellectual pursuits with works of benevolence and the rich luxury of doing good."

RECENT STATISTICAL PUBLICATIONS.

Statistical Tables, exhibiting the Condition and Products of certain Branches of Industry in Massachusetts. By the Secretary of the Commonwealth. Boston, 1838.

The Legislature of Massachusetts has just published a Summary of Official Returns, exhibiting the extent and value of all the principal branches of industry within the State. In April, 1837, an Act was passed directing the assessors of each town in the Commonwealth to collect the required information, or to employ some other suitable person for that purpose; and enacting that the parties thus employed should receive 1½ dollar per day from the public Treasury.

The following abstract of the cotton manufacture will serve as a specimen of the information contained in the volume:—

Number of cotton-mills	292
" " spindles	565,031
Quantities of cotton consumed in year ending 5th April, 1837	lbs. 37,275,917
" cotton goods manufactured	ditto yds. 126,319,221
Value of ditto	ditto dollars 13,056,659
Number of males employed	4,997
" females	14,757
Capital invested in cotton-mills	dollars 14,369,719

Histoire Statistique et Morale des Enfants Trouvés. Par J. F. Terme, et J. B. Monfalcon. Paris, 1837.

* A Premium of Ten Pounds by Sir C. Lemon, Bart., M.P., F.R.S., &c., Vice President of the Statistical Society of London, for the best Essay on the Statistics of the County of Cornwall.

Ducpetiaux de l'état de l'Instruction primaire et populaire en Belgique. 2 vols. 12mo. Brussels, 1838.

Statistical and Practical Observations relative to the Province of New Brunswick. Published for the information of Emigrants, by Alexander Wedderburn, Emigration Agent, St. John, New Brunswick. 1835.

Statistische Uebersicht der wichtigsten Gegenstände des Verkehrs und Verbrauchs im Preussischen Staate und im Deutschen Zollverbande, (An Account of the principal Articles of Trade and Consumption in Prussia and the German Commercial Union,) 1831 to 1836. Compiled from Official Documents, by Dr. C. F. W. Dieterici. 1 vol. 8vo. Berlin, 1838.

MISCELLANEOUS.

Spain.—The value of military and naval stores, arms, and ammunition, furnished to the Queen of Spain by the British Government, from the 1st September, 1834, to the 6th April, 1838, was 554,454*l.*; no part of which sum has yet been repaid. The value of provisions and shops furnished to the Spanish Government and British Auxiliary Legion during the same period was 2846*l.*, and those furnished to the squadron under Lord John Hay amounted to 31,673*l.*

Commons' Papers, 1837-8, Nos. 394 & 404.

Poor-Law Unions, size of.—Abstract of an Account relating to 501 Poor-Law Unions in England:—

	Greatest.		Least.		Average.
	Name of Union.	Number	Name of Union.	Number	Number.
Population in 1831	Bradford, York .	94,621	Catherington, Hants . . }	1,950	17,302
Size in square miles	Bellingham, Northumberland . }	331	Strand, Westminster . }	$\frac{1}{2}$	78
Number of Guardians . . . }	City of London .	127	Hoo, Kent .	8	35

No Return could be made of 20 Unions in Lancashire, and of 6 in Yorkshire. The number of Unions in Wales is 42, and the total number in England and Wales, when all are arranged, will be, according to this account, 569.

Commons' Paper, 1837-8, Nos. 236.

Travelling by Holyhead Road.—The following comparative statement of the amount and description of travelling through one of the gates on the Holyhead and Shrewsbury road, formerly the chief route to Ireland, in the years ending 1st February, 1834 and 1838, indicates the change which has occurred in the traffic on this line of road:—

	1833	1837		1833	1837
Carriages and four . .	131	72	Saddle horses . . .	1090	2099
Ditto and pair . . .	747	535	Cart horses . . .	1179	3823
Chaises and pair . .	143	97	Cattle	4186	3020
Total	1021	704	Sheep and Pigs . .	1427	588
Gigs	536	1391			

Report of Commissioners, 1838.

Negro Education—Jamaica.—The apprentice population of Jamaica was 347,921 in 1834. The number of whites is estimated at 30,000, and that of free coloured persons at 70,000; making the total population 447,921.

In the year 1837, there were 541 schools in the island, of which 183 were public day-schools, 139 sunday-schools, 95 evening-schools, and 124 private day-schools. The total number of scholars on the books was 42,766, of whom 4012 attended private schools, and 38,754 public schools. The average attendance of the latter was 30,541; of whom 9789 were day-scholars, 16,806 sunday-scholars, and 3946 evening-scholars. The day-scholars consist chiefly of the free children of apprentices; one-fourth perhaps consists of the children of poor free coloured people and Maroons. The sunday and evening-scholars are chiefly young or adult apprentices.

Of the public schools, 87 are supported by the Bishop of the island or the vestries, aided by endowments, or by the Society for the Propagation of the Gospel; 56 are maintained by proprietors of estates; 5 by native societies or religious bodies; and 269 by the Church, Wesleyan, Moravian, Baptist, London, and Scottish Missionary Societies, the Ladies' Negro Education Society, and the Trustees of the Mico Charity. Of the 417 public schools, 221 were founded in 1836 and 1837.

Commons' Paper, 1837-8, No. 113.

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ending 1st and 29th of May, 1838.

Quarters ending	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
1st May.	£. 19,084,000	£. 11,006,000	£. 30,090,000	£. 22,768,000	£. 10,002,000	£. 32,770,000
29th „	19,018,000	10,786,000	29,804,000	22,648,000	9,806,000	32,454,000

Weekly Average Prices of Corn in England and Wales, in the Month of May, 1838.

	Weeks ending May				
	4th.	11th.	18th.	25th.	Average of the Month.
	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat	60 0	60 10	62 2	62 4	61 4
Barley	30 1	29 10	30 2	31 2	30 3
Oats	22 0	22 0	22 8	22 8	22 2
Rye	31 4	31 3	32 6	33 9	32 2
Beans.	34 11	36 4	36 5	37 0	36 2
Peas	33 8	34 4	34 4	34 5	34 2

JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

AUGUST, 1838.

Second Report of a Committee of the Statistical Society of London, appointed to enquire into the State of Education in Westminster.

At the close of their first Report the Committee stated that they were about to carry their enquiries into the parishes of St. John and St. Margaret, in Westminster, including the district known under the name of Tothill Fields. Having completed their labours as regards those two parishes, they have now to submit the result in the following Report.

The population of these parishes, according to the census of 1831, was—

St. John . . .	22,648
St. Margaret . . .	25,344

Together . 47,992

It consists principally of the working classes, and of shopkeepers, whose business is confined to supplying the wants of a population of that character.

At the census of 1821, the population was 39,222. If the increase has since gone on in an equal ratio, the number of the inhabitants at this time amounts to 54,131; and in the further supposition that the relative ages continue the same as were ascertained in 1821, there are now living in the two parishes, between the ages of 5 and 15 years, 8873 persons.

It appears from the enquiries of the Committee, that there were 4626 children between those ages, receiving some kind of instruction in schools in the winter of 1837-8, the time when these enquiries were prosecuted. This would leave 4247, or 47·8 per cent. who were receiving no instruction whatever at that period; but the number of scholars in the Dame and Common Day schools, is known to fall off very considerably during the winter months. In some instances the decrease thus caused was stated to amount to one-fourth, to one-third, and even to one-half. This arises from two causes: first, from the inability of the parents to pay for their children during the season when they themselves are often out of employment; and secondly, from the sickness of the children, or from the unwillingness of the parents to expose their children to the inclemency of the weather. This was particularly the case during last winter, which was remarkable for its great and long-continued severity.

Some allowance must be made on this account: if it be estimated at one-fourth of the number of children in the Dame and Common Day schools, the total number of children usually receiving instruction in the two parishes, will be 5045, leaving 3828, or 43·2 per cent., who are altogether without instruction, unless it be imparted to them in the houses of their parents, or in schools out of the district.

This your Committee consider to be the case to some extent; but referring to the general condition of the population, they cannot believe

that any great number of children are thus provided with instruction, and they are probably within the truth in stating their belief that at least 3000 children, between the ages of 5 and 15, are left in those parishes without any instruction whatever.

The total number of schools in the parish of St. John is 87, of which

30	are Dame schools.
25	„ Common Day schools.
11	„ Middling Ditto.
2	„ Superior Ditto.
3	„ Infant schools.
6	„ Charity schools.
7	„ Evening schools.
4	„ Sunday schools.

Total . . . 87

The total number of scholars is 2759.

The number of schools in St. Margaret's is 98, of which

33	are Dame schools.
16	„ Common Day schools.
9	„ Middling Ditto.
2	„ Superior Ditto.
3	„ Infant schools.
18	„ Charity schools.
8	„ Evening schools.
9	„ Sunday schools.

Total . . . 98

The scholars are in number, 3024.

There are thus in the two parishes 185 schools, containing 5783 children, of whom 3176 are boys, and 2607 are girls.* Of this number

3,655	attend Day or Evening schools only.
1,542	„ Sunday, as well as Day schools.
586	„ Sunday schools only.

Total . . . 5,783

It is for others to determine from the facts adduced by your Committee, how many are deriving any solid advantage from the attendance.

In the Dame schools in the two parishes, there are 721 children, of whom 296 are under 5 years of age, and 425 between 5 and 15. In the Common Day schools there are 954 children, of whom 185 are under 5 years of age, 766 between 5 and 15, and 3 above 15. In the Middling Day schools there are 602 children, of whom 20 are under 5 years of age, 559 between 5 and 15, and 23 above 15. In the Superior Day schools there are 88 children, all of whom are between 5 and 15 years of age. In the Infant schools there are 633 children, of whom 415 are under 5 years of age, and 218 above 5, seldom exceeding the age of 8. In the Charity schools there are 2085, of whom 60 are under 5 years of age, 2009 between 5 and 15, and 16 above 15. There are 114 children attending Evening schools, of whom 63 are between 5 and 15 years of age, and 11 above 15; the ages of the remaining 40 could not be ascertained.

The number of children attending Sunday schools is 2128, of whom 1542 attend Day schools likewise, leaving 586 who receive tuition only

* For the sexes of the children in each class of schools, see Tables I. and XVII. at pages 204 and 214.

on Sunday. Of the total number of Sunday scholars 437 are under 5 years of age, 1668 between 5 and 15, and 23 above 15.

Thus there are 1,081 children under 5 years of age, 4626 between 5 and 15, and 76 above 15, to whom some kind of education is given.

Dame Schools.

The children attending these schools are sent entirely at the cost of their parents or friends, who pay for them a sum usually varying from 2*d.* to 8*d.* per week, and in one instance amounting to 15*s.* a quarter. The parents consist principally of mechanics and labourers, with some small shopkeepers, and a few soldiers belonging to the regiments quartered in the vicinity.

The children generally remain at school from 9 o'clock in the morning until 12 at noon, and from 2 in the afternoon until 5, in all 6 hours, which is more than sufficient time for as much instruction as ought to be given to young children.

Spelling and reading are professed to be taught in all these schools, but nearly half the scholars have not advanced beyond the first study; needlework is taught in most, but the number of girls learning is not a half of the whole number. In 8 schools, 32 scholars were learning to write on slates; in 5, arithmetic was taught, and 21 children were under instruction in it; in 18 schools, grammar was taught to 24 pupils—and in 5 instances the mistresses declared themselves competent to teach geography, and in 3, to teach history, but only one pupil was learning either branch.

The moral and religious duties are professed to be taught in all, but how far this profession is borne out in practice your Committee have no means of knowing, beyond the mere fact that a Bible or Testament is to be found in most of them. Other books, besides these and spelling-books or primers, were rarely found in these schools. In some instances there was but one book in the school, in others any book brought by the children was made use of: indeed, this latter practice appears to be generally adopted. There are no maps or globes in any of the schools, and the following is a list of all the books found in them.*

Bible, Testament, and Prayer Book.

Religious Tracts.

Explanation of Collects.

Watts's and other Hymns.

Various Primers.

Murray's English Grammar.

Hewlett's Reading & Spelling Book.

Little Red-Riding-Hood.

First Class Book.

Mamma's Gift of Amusement.

Mavor's Spelling Book.

Goldsmith's Natural History.

Cock-Robin's Alphabet.

Whenever sewing, marking, or anything beyond reading is taught, an extra 2*d.* is generally charged for each description of instruction.

It does not appear that the children often remain for any considerable time at these schools, as the number admitted during the past year generally exceeds those upon the books. In one instance there were 18 admitted, while there were but 11 on the books; in another 30, while 10 only were on the books; and there is a case in which 80 were thus admitted, and only 20 were upon the books. But this circumstance was placed in its strongest light by the enquiry being prosecuted during the winter months, at which time, as has been before stated, there is

* For a list of books found in each Dame school, see Table XIII., at page 210.

usually a considerable falling off in the attendance of the scholars, particularly in the inferior schools. A few of the children, however, in some instances remain for a considerable time, varying from one to six or seven years.

Although a large number of these children are of an age varying from 2 to 5 years, the schools appear to be attended by others far more advanced in years, varying from 5 to 14 years. In only 11 out of 63 schools, is there any division of the children into classes; nor with these exceptions is it apparent that any system is attempted.

The school-mistresses in many instances do not give themselves up entirely to the profession of teaching, but look to it merely as a subsidiary occupation while pursuing some other business; for out of the 63 schools the mistresses of 30 either take in needlework, or, in a few instances, have some other occupation, such as keeping a shop or a dairy. Only 12 of the mistresses were brought up to the profession of teaching, while many who have been thus engaged for a number of years, were driven to this course by necessity. 50 of the mistresses of these schools professed to belong to the Established Church. Of the remaining 13, eight were Wesleyan Methodists, two were Baptists, one an Independent, one a member of the Scotch Church, and one belonged to Lady Huntingdon's Connexion.

The rooms in which these schools are held appear to be for the most part tolerably clean, but they are rarely used exclusively as schools; in 34 cases they serve as bed-rooms, and in many for the general purposes of the family, while in several even the business of a shop is conducted. The size of the rooms is generally insufficient; the mean length being 13 feet, the width 11 feet, and the height 8 feet. The largest was 20 feet in length, 16 in width, and 9 in height: the smallest 9 feet in length, 8 in width, and 8 in height.

In a large proportion of instances the agent procured a statement of the mode in which the mistresses rented their rooms, and of the amount which they paid weekly for them. In 17 cases they rented the whole house, and as they usually let part of it, it was not thought necessary to enquire the amount of rental. In 5 they lived with their relations; and in 22 the weekly rental for one or two rooms varied from 1s. 6d. to 6s., the greater proportion being 3s. or 3s. 6d.

Common Day Schools.

The children are sent to these schools at the expense of their parents, who pay a weekly sum of not less than 4d., nor more than 1s.; or a quarterly sum of not less than 8s., nor more than 21s. At the same school pupils are taken upon different terms, varying with the different descriptions of instruction communicated to them: thus, a child who only learns to read will pay 8s. or 10s. per quarter; if writing be added, 12s. will be charged; if arithmetic, 15s.; if parsing, 18s.; if geography, 21s. The weekly payments are graduated in a similar manner. The parents belong principally to the class of small shopkeepers—some are mechanics, and a few only are labourers or soldiers.

The hours of attendance are generally from 9 in the morning until 12 at noon, and from 2 in the afternoon until 5,—in all 6 hours.

In these schools, as in the Dame schools, it is to be remarked that, with very few exceptions, the entrances within the course of the year exceed

considerably the number of children upon the books, although there are instances in which the children have remained at the school 3, 4, 5, and even 10 years. Three of these schools have been established for 25 years and upwards, 9 for 10 years and upwards, the remainder are of later date, and 12 of them have been founded since the year 1836.

Out of the 954 children attending them, 812 learn to read, and the remainder to spell; 394 learn to write, 301 learn arithmetic, 368 sewing, 203 grammar, 205 geography, 234 history, 4 geometry, 4 mensuration, 1 French, and 1 drawing; and 921, according to the statement of the teachers, are instructed in their moral and religious duties. None of the boys are employed in any industrial work for any portion of the time they are at the school, and sewing appears to be the only description of work pursued by the girls.

With regard to the different subjects professed to be taught, we have no means of showing how far the profession was borne out by the practice, as the agent had seldom an opportunity of examining the children; we must therefore seek for some evidence of the character of the instruction elsewhere, and for the purpose of doing this we shall enumerate the catalogue of books. In several schools the only books met with were, the Bible, Testament, Primers and Spelling-books. In others were found in addition to these, Watts's Hymns, Pinnock's Catechisms of Arithmetic, History and Geography, and Murray's Grammar. In others, Goldsmith's History of England, Walkington's Assistant, and in one case, Bonnycastle's Algebra. But the following is a list of the principal books found in these schools.*

Of religious books there were none except the Bible, Testament, and Watts's Hymns. The other books were Primers and Spelling-books; Goldsmith's Histories of England, Rome, and Greece; Geography, and Natural History; Pinnock's Catechisms, Robinson's Ancient History, Murray's and Blair's Grammars, Walkington's Assistant, Le Sage's Universal History, Bonnycastle's Mensuration and Geometry, Fairburn's Tables, Dictionaries; Baldwin's Greece, Cailor's Travels, Rambler.

There are maps in four of these schools, and globes in two; there do not appear to be mathematical instruments or other similar aids for instruction in any.

Although there are children of two and a half years old attending these schools, there are others of fifteen years of age. In all, the children are divided into classes.

Nine of these schools are kept by masters, and thirty-two by mistresses, of whom only two adopted the profession from choice. With three exceptions they do not appear to have any other employment. Twenty of them stated that they were educated for the profession, and twenty-one, that they were not. Many of the teachers have been long engaged in the business; seven for upwards of 30 years, and seventeen others for upwards of 10 years. Thirty-two out of forty-one belong to the Established Church. Of the remaining nine, one is a Roman Catholic, and one an Independent; two are Wesleyan Methodists, three are Baptists, and two are Dissenters whose particular sect is not specified.

The school-rooms in ten instances are used by the teachers for every domestic purpose; they appear, however, to be upon the whole cleanly, although the ventilation in twelve instances is indifferent, and the size

* For a complete list see Table XII., at page 209.

inadequate. The mean length is $15\frac{1}{2}$ feet, the width $12\frac{1}{2}$ feet, and the height 9 feet. The largest school-room is 35 feet long, 14 in width, and 9 in height; the smallest 11 feet long, 11 wide, and $9\frac{1}{2}$ in height.

Middling Day Schools.

To these schools also the children are sent at the expense of their parents, who pay for their education a sum varying from 10s. to 31s. 6d. per quarter. The amount differs with the variety of instruction given: French, Latin, and Music are generally charged extra. The parents consist almost entirely of tradespeople and persons employed in offices of various descriptions, such as lawyers' clerks, messengers in the public offices, inferior officers of the House of Commons, &c., with a few mechanics of a superior class. The hours of attendance are from 9 to 12, and from 2 to 5,—in all six hours.

In the other schools of which we have given an account, the number of entrances during the last year far exceeded the number of children upon the books, the contrary is here the case. The number of children upon the books is generally three or four times greater than the entrances of the past year. Two, three, or four years appear to be the usual period for which the children remain at school, while in many instances there are children who have been in the schools for six, seven, eight, or nine years.

Three of these schools have been established for a long period; one dates so far back as 1781, another to 1796, and a third to 1807. The remaining seventeen have been founded within these last few years, most of them since 1820.

The total number of children attending these schools in 602. Out of 467 of these, of whom an account has been obtained—

461	are stated to learn	reading.	28	are stated to learn	drawing.
380	„	writing.	19	„	classics.
354	„	arithmetic.	26	„	geometry.
237	„	sewing.	24	„	mensuration.
6	„	knitting.	54	„	French.
362	„	grammar.	436	„	{moral & reli-
304	„	geography.			gious duties.
263	„	history.			

None of the boys have any industrial occupation. In the girls' schools, with one exception, in which six girls are instructed in knitting, nothing beyond sewing is taught. The household duties in which women are required to take an active part in after life, forms no part of the business of any of these schools.

The following is a list of the books commonly used in schools of this class.

Bible and Testament.	Blair's Class Book.
Barrow's Questions on Old and New Testament.	Lennie's, Blair's, Lovechild's, Pinnock's, and Murray's English Grammars.
Watts's Divine Songs.	Murray's, and Alderson's Exercises.
Barbauld's Hymns in Prose.	Pinnock's Orthography.
Mavor's, Carpenter's, Robinson's, Vyse's, Guy's, Universal, Bible Spelling-books.	Butler's Etymological Guide.
Primers.	M.S. Orthographical Rules.
Pinnock's and Blair's Catechisms.	Colloquial Guide.—Blair's Preceptor.
Carpenter's and Cobbin's English Vocabulary.	Mavor's Expositor, and Natural History.
Cobbin's Instructive Reader.	Johnson's, Entick's, and Jones's Dictionaries.
	Miss Wakefield's Mental Improvement.

- Blair's Preceptor, and Grammar of Philosophy.
 Trimmer's Introduction to the Knowledge of Nature.
 Joyce's, Walkingame's, Butler's, Bonnycastle's, Keith's, Hutton's, and Grey's Arithmetics.
 Arithmetical Table Books.
 Morrison's Book-keeping.
 Brydget's, and Phillips's Algebra.
 Robertson's, Hutton's, and Bonnycastle's Mensuration.
 Dalby's Mathematics.
 Bonnycastle's Geometry.
 Simpson's Euclid.
 White's Abstract of Geography.
 Goldsmith's, Guy's, Stewart's, Pinnock's, Allison's, Gautier's, and Eton Geographies.
 Carey's Globes.
 Goldsmith's, and Walker's Atlases.
 Bingley's Travels.
 Goldsmith's, and Stewart's Histories of England, Greece, and Rome.
 Robinson's Ancient History of Greece, Rome, Assyria, and Babylon.
 Pinnock's History.
 Hamel's, Chambaud's, Levizac's, and Wanostrocht's French Grammar and Exercises.
 Magnall's and Guy's Questions.
 Descarrière's Phrases.
 Tarver's Choix and Bossut's French Word and Phrase Books.
 Perrin's Dialogues, Exercises, Fables.
 Télémaque.—Recueils Choisis.
 Boyer's French Dictionary.
 De Porquet's Works.
 Edwards's, Eton, and Valpy's Latin Grammar.
 Valpy's Latin Delectus.—Ovid.—Virgil.
 Eton Greek Grammar.

Maps appear to be used in all but four of these schools, and globes are used in five. The ages of the children vary from 3 or 4 years to 15.

Sixteen of the conductors of these schools belong to the Established Church, and four are Independents. The children in all are divided into classes, varying in size with the number and attainments of the scholars. Six are kept by masters, and fourteen by mistresses.

All of the heads of these schools adopted teaching as a profession for support, one only stated that he was also influenced by choice. With four exceptions all professed to be educated for the employment, and, with one exception, none had any other occupation. Several have been engaged many years in teaching; five for twenty years and upwards.

All the school-rooms in this class appear to be set apart from those occupied by the family, and in point of size, cleanliness and ventilation, to be unexceptionable.

Both sexes are rarely received in the same school; and in those instances in which one or two children of a different sex from the majority of the scholars are admitted, they are of a very tender age, and are relations either of the teachers or of some of the other pupils.

Superior Schools.

The pupils attending these schools are the children of professional men and private gentlemen.

Two of them are for boys, and two for girls. The number of children attending is eighty-eight, all of whom are between five and fifteen years of age. Seventy-three are boys and fifteen are girls.

The ordinary period for which children remain at these schools is about four years, while some prolong their stay for double that time. The same remark which has been made with respect to the proportion of scholars on the books to entrances during the year, in the instance of Middling Day schools, is equally applicable to this class.

The terms of these schools vary from 25s. to 42s. per quarter, and where instruction beyond the regular routine of the school is given, additional charges are made. In one instance, where dancing, music, and the use of the globes are taught, the charge is three guineas per quarter.

One of these schools was founded in 1809, another in 1821, another in 1828, and the fourth in 1832.

The hours of attendance in three, are from 9 o'clock in the morning to 3 in the afternoon, in the other, from 8 in the morning to 12, and from 2 in the afternoon till 5, with vacations of four weeks at Christmas and Midsummer; in two of the schools, the same, with ten days at Easter in one, and in one three weeks at each of these seasons.

In one school no account was obtained of the number of children studying each branch of knowledge, but in the other three, containing 81 children, all were learning to read and write, 65 were learning arithmetic, 7 sewing, 61 grammar, 67 geography, 63 history, 7 drawing, 10 classics, 4 geometry, 6 mensuration, 23 French, and all were being instructed in the moral and religious duties. The eldest children were from fourteen to sixteen years of age, the youngest between five and six.

None of the boys in these schools have any industrial occupation. The monitorial system is adopted in two, the system of classes in all, individual instruction is also given in all, and in two, lectures are occasionally delivered. The children are all questioned upon what they read or learn.

The following is a catalogue of the books found in some of these schools.

Bible and Testament.	Allison's, Gautier's, Goldsmith's, Guy's and Ladies' Geography.
Barbauld's Prose Hymns.	Goldsmith's Histories of England, Rome and Greece.
Watts's Divine Songs.	History of France for the Écoles Polytechniques.
Mavor's, Carpenter's, and Guy's Spelling-books.	Perrin's and Hamel's French Grammars.
Guy's Questions.	Noel and Chapsal's French Grammar and Exercises.
Lennie's Child's Ladder.	Magnall's Questions, and Sequel.
Pinnock's Catechism.	De Porquet's Works.—Bossut's Phrases.
Lewis's and Murray's English Grammars.	Perrin's Fables.—Télémaque.
Johnson's Dictionary.	Nugent's and Boyer's Dictionaries.
Walkingame's, Guy's, Tait's, and Bonnycastle's Arithmetic.	
Bonnycastle's Geometry and Mensuration.	

Maps are used in three of these schools, globes in two: in one there were neither maps nor globes. Teaching is the sole employment of the directors of these schools, and they were all educated for it. One of the masters was educated at Dunkeld, in James VI.'s Royal Grammar school; another in the school of which he was then the master. One of the mistresses was educated partly at home, and partly at Paris; and the other in London. All of them have been employed in the profession for some years; one for fourteen years, another for ten, another for seven, and the other for forty years. Three, out of the four, appear voluntarily to have adopted teaching as a profession from an early period.

All the school-rooms are cleanly, sufficiently ventilated, and of fair dimensions.

Evening Schools.

These schools are all, with one exception, kept by masters of common day-schools. Of the 113 children who attend these schools, 37 are boys, and 77 are girls. There are no children under 5 years of age attending them, the greater part being between 5 and 15. The usual hours of attendance are from 6 o'clock in the evening until 8. The payments vary from 6d. to 1s. per week. Some of them have existed for many years, one so far back as 1809.

The schools supported by endowments, public subscriptions, or by individuals, or attached to a place of worship, may be divided into 3 classes; viz., Charity Day schools, Infant schools, and Sunday schools.

Charity Day Schools.

These schools are 23 in number,* and contain 2085 children, of whom 1311 are boys and 774 are girls. Of these schools 4 are either wholly or partially supported by endowments; 9 are supported by public subscription, with collections at churches or chapels; 4 by collections alone; 2 are supported by the poor's rates, and 2 by the county rates. In 10 of these schools the parents pay a small weekly sum, generally of 1d. or 2d. per week, but in one instance a few of the children pay 6d., and in one from 8d. to 1s. per week.

Out of the 2,085 children who attend these schools,

360 learn to spell.	326 learn history.
1,689 " to read.	20 " drawing.
1,572 " to write.	6 " the classics.
1,250 " arithmetic.	37 " geometry.
500 " sewing.	40 " mensuration.
42 " knitting.	275 " domestic duties.
358 " grammar.	180 " psalmody.
146 " geography.	1,761 " moral and religious duties.

The following is a catalogue of all the books found in these schools, but more than a small number of them were not found in any one:—

Old and New Testament.	Primers.
Selections from the Bible.	Markham's, Windett's, the Universal,
Watts's Catechism.	and Sunday School Spelling-books,
Lessons from Psalms.	Crosley's Calculation.
Discourses on Christ.	Blair's Class Book.
Testimony of the Prophecies.	Lennie's Grammar.
Clarke's Scripture Questions.	Pinnock's English History.
Parables.—Miracles.	Stewart's Geography.
On the Principles of Faith.	Walkington's Tutor's Assistant.
Books selected from the Catalogue of the	Rivington's Mixed Reading Book.
Society for the Promotion of Christian	Instructor.—Murray's Juvenile Reader.
Knowledge.	Murray's English Reader.
Roman Catholic Religious Books.	Wardell's, and Bonnycastle's Arithmetic.
Cards of the British and Foreign System.	Miscellaneous Reading book.

Three of these schools have lending libraries attached to them.

A few of the children remain at these schools for a considerable time, 5, 6, or 7 years; but the majority remain but a very short period, as is evident from the fact of admissions within the past year being about 2109, while the total number of children in the schools amounts only to 2085.

60 of the children are under 5 years of age, 2009 are between 5 and 15, and 16 above 15.

The salaries of the masters of these schools vary: one married couple, both acting as teachers, receive 100*l.* per annum, with house and coals, one 66*l.*, without lodging, and another 60*l.*; one master receives 84*l.* 10*s.*, and his wife 52*l.*, from both of which sums certain considerable deductions are made for school expenses; one master receives 50*l.*, and another

* Inclusive of the Boys' and Girls' schools in Tothill Fields Prison, and exclusive of Lady Dacre's school, from which no returns could be obtained. The Director declined furnishing them without the permission of the Lord Mayor and aldermen, under whose superintendence the school is placed; and your Committee were unsuccessful in their application to his Lordship for the necessary order,

30*l.* with lodging; others are paid weekly sums varying from 10*s.*, with perquisites, to 30*s.*: some have the pence paid by the children in addition to their salaries, while others again have no payment but what is received from that source.

The children in these schools are all divided into classes. The monitorial system is adopted in all but 5 instances, and individual instruction is stated to be generally combined with it. In 5 instances the individuals at the head of these schools undertook the profession from choice, and in all others for support. All the teachers in these schools, with one exception, appear to have no other employment: 12 professed to be educated for the business, the remainder were not. Of the teachers, 3 are Independents, 2 are Roman Catholics, and 1 is a Presbyterian; the remainder belong to the Established Church.

The mean length of the school-rooms is 31½ feet, the mean width 18½, the mean height 10½. The largest is 66 feet in length, 32 in width, and 18 in height; the smallest 20 feet in length, 10 in width, and 7½ in height. Two only of the rooms are insufficiently ventilated, while all but 3 or 4 are cleanly, and the children in them orderly.

Maps are used in 4 schools, and globes in one; the remaining schools have neither maps nor globes.

Many of the teachers have been engaged for many years in the profession, one for 40, one for 25, one for 22, and 4 for between 10 and 20 years. In three of the schools the boys have some industrial employment; in one they wind cotton, and mend shoes and clothes; in another (in the prison) they pick oakum and make shoes, and in the other also they pick oakum. In 10 of these schools the children are either wholly or partially clothed. The usual hours of attendance are from 9 in the morning until 12 at noon, and from 2 in the afternoon until 5 in the evening.

There are generally vacations of a week or a fortnight at Christmas and Midsummer.

Among these schools are the Central schools of the National Society, for boys and girls, and two Roman Catholic schools of considerable size.*

Infant Schools.

These schools are supported by voluntary contributions, and by payments from the parents of the children of sums of 1*d.* or 2*d.* per week.

Of the 633 children who attend these schools, 415 are under 5 years of age, and the remaining 218 are between 5 and 8 years old, with a few in one school above the latter age. The number admitted during the past year was 1115, so that the numbers admitted in the year was nearly double the number in attendance when the enquiry was made. The hours of attendance appear to be the same as those of most schools for children of a more advanced age, viz., from 9 to 12, and from 2 to 5. Most of these schools have been but lately established; one, however, which was the first Infant school founded in England, was originally established in Westminster in the year 1819, and removed to its present site in 1822.

The books used at these schools are the Testament, Parables, Miracles, the cards of the Infant School Union, Primers, Bilby's and Ridgway's Books and Cards, Spelling-books, and Blair's Mother's

* For a list of these schools see Table XIV., at page 212.

Catechism. In one of the schools there is a map of the Holy Land, in another the same, with a map of England and two small paper globes.

In two schools the Infant system of teaching arithmetic is used; in one arithmetic is taught mentally; in one by tables only; in one by tables and little questions, and in one it is not taught at all.

In five of these schools the children are divided into classes; in all the monitorial system is adopted; while in four it is combined with individual instruction. Four of the teachers of these schools belong to the Established Church, 1 is an Independent, and 1 a Swedenborgian.

The rooms in which the schools are held are on an average 36 feet long, 23 wide, and 14 high; the largest is 52 feet long, 11 wide, and 8 high; the smallest is 20 feet long, 15 wide, and 9 high; 1 is ill ventilated; 5 are orderly and clean, while 1 is the contrary. As to the motives which induced the teachers at these schools to undertake their situations, 3 appear to have engaged in it for support only, 1 from a liking for the profession, 1 from the mixed motives of choice and profit, and 1 from choice influenced by religious motives. None of them appear to have any other employment. The emoluments of the teachers are various, some being paid 10s. or 12s. per week, besides the pence contributed by the parents of the children; and others have a fixed annual salary, in one instance of 60*l.* In one instance only are any clothes given to the children.*

Sunday Schools.

These are 13 in number, including 1 in which instruction is given only in the evening of the Sabbath. Of this number, 4 are in St. John's, and 9 in St. Margaret's; 6 of them are immediately connected with Day schools. The total number of scholars on the books is 2128, of whom 1542 attend Day schools likewise; the average attendance is about 1373, or 64 per cent.

Of these schools 4 are connected with the Established Church; 6 with congregations of Independents, of which number 5 are attached to one congregation; 1 is supported by the Wesleyan Connexion, 1 by Baptists, and 1 by a congregation of Dissenters professing peculiar tenets.

The children do not contribute any thing, as the teachers all undertake their office gratuitously, and the schools are held in religious edifices, or in rooms used during the week for purposes of education. The number of teachers is 182; which gives a proportion of one teacher to 11½ scholars. The instruction in these schools is confined to reading the scriptures, with the exception of spelling, which in 4 schools is taught to a small part of the children. The time which is occupied in the schools varies from 1 to 5 hours. Five of these schools have a lending library attached to them; and in five, some of the children are clothed.*

It only remains to notice Westminster school, which for the same reason as that assigned in the last Report for the omission of King's College, your Committee have thought it right to exclude from the preceding abstract. The school in the Penitentiary at Millbank, and the Regimental school in the Cavalry Barracks in Hyde Park, have also been omitted, on the ground of their not being connected with the permanent population of the district.

* For a list of these schools see Table XIV., at page 212.

Your Committee are far from considering that the information which has been collected is as full and as perfect as could be desired. Beyond the particulars which the agent was able to collect from a view of the school, the information given depends upon the testimony of the teachers alone.

As far as the Committee are able to judge from the written reports, and from the verbal communications of their agent, the quality of the instruction given in the different classes of schools existing in these two parishes does not appear materially to differ from that imparted in the parishes which formed the subject of their former report, so that it is not necessary for your Committee to enter, on this occasion, upon any detailed remarks concerning it. The enquiry is still going forward, under the sanction of the Council, and will shortly be so far completed that a Report will be presented including the remaining parishes of Westminster. It may then be thought proper to lay before the Council and the Society some of those practical considerations which have presented themselves to the members of the Committee in the course of their enquiries, and which it appears necessary to bring forward, in order to derive from the investigations those advantages of which they may fairly be made productive.

TABLE I.—DAY SCHOOLS.

Summary of Schools, and of Children receiving Education, exclusive of Sunday Schools.

DESCRIPTION.	Number of Schools.	Number of Teachers.	Number of Scholars.		
			Boys.	Girls.	Total.
Dame Schools	63	68	296	425	721
Common Day Schools for Boys only . .	8	9	303	..	303
„ „ for Girls only . . .	1	1	..	16	16
„ „ for Boys and Girls . . .	32	39	182	453	635
Middling Day Schools for Boys . . .	7	12	330	1	331
„ „ for Girls	13	19	18	233	271*
Superior Day Schools for Boys . . .	2	2	72	..	72†
„ „ for Girls	2	4	1	15	16‡
Children in Charity and Endowed Schools } not taught gratuitously . . . . . }	..	..	8	2	10§
Total of Day Schools supported solely } by the Parents }	128	154	1210	1165	2375
Infant Schools assisted by the Public . .	6	10	353	280	633
Charity Schools, and Schools attached to } Public Institutions }	23	29	1303	772	2075
Total of Day Schools	157	193	2866	2217	5083
„ of Evening Schools	15	..||	38	76	114
Total of Day and Evening Schools . .	172	193	2904	2293	5197

* Fourteen Boarders included.

† Ten Boarders included.

‡ One Boarder included.

§ The total number of Children in Charity and Endowed Schools is 2085; of whom 10 are paid for by the Parents, and 2075 are taught gratuitously, or for sums not exceeding 3d. a week.

|| The Evening Schools are conducted by Masters of Day Schools.

TABLE II.—DAY SCHOOLS.

Date of Establishment.

There were founded, in or before 1820, 2 Dame schools, 11 Day, and 3 Evening schools, 1 Infant school, and 13 Charity schools.

Between 1821 and 1830 were founded 9 Dame schools, 19 Day, 2 Evening, 1 Infant, and 2 Charity schools.

Since 1830 were founded 52 Dame, 35 Day, 3 Evening, 4 Infant, and 8 Charity schools.

Of 7, the date of establishment could not be ascertained.

The above statement will show how recently a large majority of the Day schools have been established; and, on the other hand, that more than half the Charity schools were founded before the year 1820.

TABLE III.—DAY SCHOOLS.

Mode in which the Schools are supported.

Wholly Free.—No part of the expense being borne by the scholars.

Clothes, board, and education are provided without charge in one school, containing 21 boys.

Clothes and education are provided for all the scholars in 4 schools, containing 177 boys and 113 girls; and in 2 other schools they are provided for part of the scholars to the number of 50, in equal proportions of each sex. The total number, therefore, who are clothed and educated without charge, is 340. This includes the 2 schools in the workhouse.

Education alone is provided for all the scholars in 6 schools; viz. the Central schools of the National Society, the Roman Catholic, and the Tothill Fields Prison schools. In 2 other schools, part of the scholars are taught without charge. The total number of children receiving gratuitous education alone is 930; and the total number who receive it, with or without other advantages, is 1291, of whom 861 are boys, and 430 are girls.

Partially Free.—Part of the expense being borne by the scholars.

	Boys.	Girls.	Total.
In Charity schools . . .	442	342	784*
In Infant schools . . .	353	280	633

Total number paying part of the expense . . . 1417

Not Free.—The whole expense being borne by the scholars.

In the Dame, Common, Middling, and Superior Day schools, 2365 scholars, with 10 in Charity schools, and 114 in Evening schools; making in all 2489, of whom 1246 are boys, and 1243 are girls.

Of the 23 Charity Day schools, 4 are either wholly or partially supported by endowments; 9 are supported by public subscription, together with collections at churches or chapels, 4 by collections alone; 2 are supported out of the Poor's Rates, 2 out of the County Rates, and 2 which have been recently established, will be in future assisted by subscriptions and collections in churches.

Of the 6 Infant schools, 2 are supported by subscriptions, with collections, 2 by individuals, assisted in one instance by a few subscriptions, and the two other nearly support themselves.

The expenses of the Sunday schools are supported in eight instances by collections and subscriptions, in one by the former mode, and in three by the latter. The Sabbath Evening school is conducted without charge.

* Exclusive of the 10 children in Charity schools who pay sums exceeding 3d. and who are therefore placed in the class of those who pay the whole expense.

TABLE IV.—DAY SCHOOLS.

Statement of the Weekly or Quarterly Charge for Instruction in Schools supported entirely by payments of the Scholars.

		Dame.		Common Day.		Middling.		Superior.	
		Schools	Scholars	Schools	Scholars	Boys and Girls.		Boys and Girls.	
						Schools	Scholars	Schools	Scholars
Weekly.	£. s. d.								
	0 0 2	2	10	..	..	..	..	..	..
	0 0 3	6	43	..	..	..	..	..	..
	0 0 4	20	240	1	20	..	..	..	..
	0 0 6	22	249	5	85	..	..	..	..
	0 0 8	10	129	7	145	..	..	..	..
	0 0 9	1	12	1	27	..	..	..	..
	0 0 10	1	30	5	160	..	..	..	..
	0 1 0	..	..	8	151	b 1	18	..	..
	0 12 0	..	..	3	93	g 3	74	..	..
Quarterly.	0 13 0	..	..	1	60	..	..	..	..
	0 15 0	1	8	7	139	b 1	50	..	..
						g 2	25	..	..
	0 18 0	..	..	..	..	b 1	74	..	..
						g 1	18	..	..
	1 1 0	..	..	3	74	b 4	189	..	..
						g 6	130	..	..
	1 11 6	..	..	..	..	g 1	24	..	..
	2 2 0	..	..	..	..	..	..	b 2	72
								g 2	16
Total .		63	721	41	954	20	602	4	88
Average Weekly Charge . . .		5½d.		9½d.		Boys. 1s.	Girls. ..	..
Average Quarterly Charge . . .		15s.		15s. 1½d.		19s. 4d.	18s. 9d.	£2. 2s.	

TABLE V.—Statement of the Ages of the Children in Day and Evening Schools.

	Under 5 Years.	Between 5 and 15 Years.	Above 15 Years.	Total.
Dame Schools.	296	425	..	721
Common Schools	185	766	3	954
Middling Schools.	20	559	23	602
Superior Schools . . . . .	..	88	..	88
Infant Schools	415	218	..	633
Charity Schools	60	2,009	16	2,085
Evening Schools . . . . .	..	103*	11	114
Total	976	4,168	53	5,197

* Of this number are 40 whose ages have not been ascertained.

TABLE VI.—DAY SCHOOLS.

Subjects professed to be taught in each class of Schools.

SUBJECTS.	NUMBER OF SCHOOLS.							
	Dame.	Common.	Middling.	Superior.	Infant.	Charity.	Evening.	Total.
Reading . .	63	41	20	4	6	23	15	172
Writing . .	8	41	20	4	6	23	6	108
Arithmetic . .	5	41	20	4	6	20	6	102
Needlework . .	52	33	13	2	6	10	..	116
Knitting . .	..	..	1	..	..	..	..	5
Grammar . .	13	38	20	4	6	4	3	94
Geography . .	5	32	20	4	6	10	1	77
History . .	3	28	20	4	6	9	1	71
Classics . .	..	1	7	2	..	9	..	11
French . .	..	4	12	3	..	1	..	19
Italian . .	..	..	2	..	..	..	..	2
Geometry . .	..	3	6	..	..	..	..	11
Mensuration . .	..	4	6	..	..	2	1	14
Drawing . .	..	3	10	2	..	3	..	17
Music . .	..	1	7	2	..	2	..	10
Domestic Duties	..	..	..	..	..	4	..	4
Morals . .	62	41	17	4	6	23	1	154
Religious Duties	62	41	17	4	6	23	1	154
Total . .	63	41	20	4	6	23	15	172

TABLE VII.—DAY SCHOOLS.

Method of Instruction professed to be pursued.

Dame schools, Total number, 63. In 13 of these the children are classed; in 41 the mistresses profess to question the children in what they learn; the monitorial system is not followed in any; there are no visitors nor periodical examinations.

Common Day Schools, Total 41. Classes in 31; monitorial system in 1; children questioned in 37; and periodical examinations in 6.

Middling Day schools, Total 20. Classes in all; monitorial system in 6; children examined in all; and periodical examinations in 16.

Superior Day schools, Total 4. Classes and children examined in all; monitorial system in both the boys' schools; and periodical examinations in both the girls' schools.

Infant schools, Total 6. Classes in 5; monitorial system and children questioned in all; appointed visitors in 4; and periodical examinations in 2.

Charity schools, Total 23. Scholars classed and questioned, and visitors appointed in 21; respecting the other 2 the necessary information could not be obtained; monitorial system in 18 out of the 23; and periodical examinations in 9.

Evening schools, Total 15. In one only the scholars were classed and questioned, and a periodical examination is held.

TABLE VIII.—DAY SCHOOLS.

Professed Method of Instruction in Geography.

Maps and Globes are used in 2 Common Day schools for boys; in 4 Middling Day schools for boys, and 4 for girls; in the 2 Superior schools for boys, and in 1 Charity school—in all 13 schools.

Maps only are used in 2 Common Day schools; in 2 Middling Day schools for boys, and 6 for girls; in 1 of the Superior schools for girls; in 2 Infant and 3 Charity schools—in all 16 schools.

In the remaining 128 schools no Maps or Globes are in use.

TABLE IX.—DAY SCHOOLS.

Statement of Schools with Libraries and Clothing Societies attached to them.

The only schools which have either a Lending Library or a Clothing Society attached to them are the 2 schools of the National Society, which have both, and one Charity Girls' school, which has the former, and in which the children receive a few articles of clothing. In 7 other Charity schools the whole or part of the children are clothed.

TABLE X.—*Information relative to the Teachers of the Day and Evening Schools.*

Dame Schools, Total 63.

Of these 33 have no other occupation, 30 have.

31 were born and educated in London, and 31 in other parts of England.

12 profess to have been educated for the employment, and 51 do not.

50 are members of the Established Church, 13 are Dissenters.

Common Day Schools, Total 41.

Of these 38 have no other occupation, 3 have.

25 were born and educated in London, 13 in other parts of England, 1 in Ireland, and 2 abroad.

20 profess to have been educated for the employment, 21 do not.

32 are members of the Established Church, 1 is a Roman Catholic, and 8 are Dissenters.

Middling Day Schools, Total 20.

Of these 19 have no other occupation, 1 mistress has.

12 were born and educated in London, 6 in the country, and 1 abroad.

16 profess to have been educated for the employment, 4 of the mistresses do not.

16 are members of the Established Church, 4 are Dissenters.

Superior Day Schools, Total 4.

Of these None have any other occupation.

2 were educated in London, 1 partly in London and partly in Paris, and one in the country.

All profess to have been educated for the employment.

3 are members of the Established Church, one is a Dissenter.

Infant Schools, Total 6.

Of these None have any other occupation.

3 were educated in London, and 3 in the country.

4 profess to have been educated for the employment, 2 do not.

4 belong to the Established Church, 2 are Dissenters.

Charity Schools, Total 23.

Of these 22 have no other occupation, 1 has.

6 were born and educated in London, 11 in the country, and 2 in Ireland.

12 profess to have been educated for the employment, 9 do not.

15 belong to the Established Church, 2 are Roman Catholics, and 4 are Dissenters.

Total 157 Teachers.

Of these 122 have no other occupation, 35 have.

79 were born and educated in London, 65 in the country, 3 in Ireland, and 4 abroad.

68 profess to have been educated for the employment, 87 do not.

120 belong to the Established Church, 3 are Roman Catholics, and 32 are Dissenters.

Note.—All the Evening schools are kept by Masters of Day schools. The Principals only of schools are included in the above abstract. Where the figures do not agree with the total numbers, the necessary information could not be obtained.

TABLE XI.—*Time which the Teachers in Day and Evening Schools have been engaged in that office.*

SCHOOLS.	Total Number of Schools.	Number of Years engaged in Teaching.								
		Less than 1.	1 and less than 2.	2 and less than 3.	3 and less than 4.	4 and less than 5.	5 and less than 10.	10 and less than 20.	20 and upwards.	Not ascertained.
Dame Schools . .	63	18	3	6	6	4	14	7	5	..
Common Schools .	41	5	3	1	1	2	5	15	9	..
Middling Schools .	20	..	..	1	..	2	6	6	5	..
Superior Schools .	4	..	..	..	..	..	1	2	1	..
Infant Schools . .	6	..	..	2	1	..	1	1	1	..
Charity Schools . .	23	2	3	1	1	..	3	5	5	3
Total . .	157	25	9	11	9	8	30	36	26	3

TABLE XII.—DAY SCHOOLS.

List of Books found in the Dame and Common Day Schools.

Notes.—*d* signifies Dame schools; *c* Common Day schools; the figures following those letters signify the number of schools in which the books were found.

Bible and Testament, <i>d</i> 21, <i>c</i> 31.	Goldsmith's First Step to Knowledge, <i>d</i> 1.
Testament, <i>d</i> 20, <i>c</i> 5.	Extracts from Natural History, <i>d</i> 1, <i>c</i> 1.
Prayer Book, <i>d</i> 2.	Religious Magazine, <i>d</i> 1.
Catechisms, Watts's, <i>d</i> 1, <i>c</i> 3.	New Guide to the English Language <i>d</i> 1, <i>c</i> 1.
Blair's First, <i>d</i> 2, <i>c</i> 2.	Pinnock's Catechisms, <i>d</i> 2, <i>c</i> 15.
Church, <i>d</i> 2.	Speaker, <i>d</i> 2, <i>c</i> 3.
Hymns, Watts's, <i>d</i> 10, <i>c</i> 5.	Grammars, Murray's, <i>d</i> 5, <i>c</i> 18.
Psalter and Little Hymns, <i>d</i> 2.	Guy's, <i>c</i> 1.
Primers, Various, <i>d</i> 24, <i>c</i> 15.	Lennie's, <i>c</i> 1.
Spelling Books, Universal, <i>d</i> 13, <i>c</i> 5.	Blair's, <i>c</i> 1.
Guy's, <i>d</i> 8, <i>c</i> 15.	Pinnock's, <i>c</i> 2.
Mavor's, <i>d</i> 16, <i>c</i> 27.	Geography, Goldsmith's, <i>c</i> 8.
Vyse's, <i>d</i> 23, <i>c</i> 16.	Guy's, <i>c</i> 7.
Carpenter's, <i>d</i> 3, <i>c</i> 19.	Pinnock's, <i>c</i> 7.
Fenning's, <i>d</i> 2, <i>c</i> 2.	History, Goldsmith's, <i>c</i> 10.
New London, <i>d</i> 5, <i>c</i> 1.	„ Greece and Rome, <i>c</i> 7.
Cobbett's, <i>d</i> 1.	Baldwin's Greece, <i>c</i> 1.
Innes's Minerva, <i>d</i> 1, <i>c</i> 1.	Robinson's Ancient, <i>c</i> 1.
Sunday School Books, Various, <i>d</i> 5.	Le Sage's „ <i>c</i> 1.
Alphabets, Various, <i>d</i> 11, <i>c</i> 1.	Arithmetic, Guy's, <i>c</i> 1.
Scripture Lessons, <i>d</i> 1.	Walkingame's Tutor, <i>c</i> 15.
Moral Song Book, <i>d</i> 1.	Bonnycastle's, <i>c</i> 1.
Mamma's Gift of Amusement, <i>d</i> 1.	„ Algebra, <i>c</i> 1.
Good Child's Book, <i>d</i> 2.	Pinnock's, <i>c</i> 1.
Wyndett's Reading and Spelling, <i>d</i> 1.	Joyce's, <i>c</i> 1.
Child's First Book, <i>d</i> 3.	Dictionary, Johnson's, <i>c</i> 3.
Collect Book, <i>d</i> 1.	Various, <i>c</i> 1.
Easy Hymn Book, <i>d</i> 1.	Magnall's Questions, <i>c</i> 4.
Explanation of Collects, <i>d</i> 1.	Chandler's Travels in Greece, <i>c</i> 1.
First Class Book, <i>d</i> 1.	Rambler, <i>c</i> 1.
Little Red Riding Hood, <i>d</i> 1.	
Hewlett's Reading Made Easy, <i>d</i> 1, <i>c</i> 1.	
Original Poems for Infants, <i>d</i> 1.	
Child's Guide, <i>d</i> 1.	

TABLE XIII.—DAY SCHOOLS.

List of Books found in each Dame School.

No. of Schools.	No. of Scholars.		Books found in each Dame School.
	Age.		
	Under 5 Years.	Above 5 Years.	
1	4	8	Bible, Testament, Vyse's Spelling, an old Speaker.
2	2	5	Bible, Testament, Scripture Lessons, Primer, and the Universal Spelling.
3	7	9	Bible and Testament, Mavor's Spelling, Primer, and Speaker.
4	7	13	Bible and Testament, Mavor's Spelling, Inner's Minerva.
5	4	1	Bible and Testament, Mavor's Spelling, Moral Song Book.
6	1	17	One little Primer, containing extracts from Scripture.
7	8	3	Little Primers.
8	4	10	Vyse's Spelling, English Primer, and some Sunday School Books.
9	2	6	Bible and Testament, Mamma's Gift of Amusement, Good Child's Book, Wyndett's Reading and Spelling, Picture Alphabets.
10	1	5	Bible and Testament, Child's First Book, Mavor's Spelling, Collect Book, Easy Hymn Book, Explanation of Collects.
11	6	5	Bible and Testament, First Class Book, and the Universal Spelling Book.
12	15	15	Vyse's, Mavor's, and the Universal Spelling Books, Primers, Mother's Catechism of Instruction, Bible and Testament.
13	1	7	Bible and Testament, Vyse's and Carpenter's Spelling, and Watts's Hymns.
14	8	12	Bible and Testament, Vyse's, Mavor's, Guy's, & Fenning's Spelling, Little Primers, Murray's small Grammar.
15	6	4	Testament, London, Mavor's, and Vyse's Spelling.
16	1	2	Testament, and one old Spelling Book.
17	3	8	Testament, Alphabets, and the Universal Spelling Book.
18	4	1	New London Spelling, and the Reading Made Easy.
19	4	5	Watts's Divine Songs, Little Red Riding Hood, Vyse's Spelling, Reading and Spelling Made Easy.
20	6	6	Bible and Testament, Mavor's and Vyse's Spelling, Murray's Grammar, Watts's Hymns.
21	4	6	Bible, Testament, and Alphabet.
22	..	7	Testament, and the Universal Spelling Book.
23	2	4	Testament, Billing's Easy Primer, Vyse's Spelling.
24	5	5	Bible and Testament, New London, Guy's, and Guide to Spelling, Prayer Book.
25	5	13	Bible and Testament, Religious Magazine, Mavor's, and the Universal Spelling.
26	7	7	Child's Guide, Primers, Vyse's Spelling, Watts's Divine Songs.
27	2	5	Testament, and Cobbett's Spelling.
28	3	4	Small Primers, Vyse's Spelling, and the New London Spelling.
29	3	1	Testament, Primer, Good Child's Book, Hewlett's Reading and Spelling.

TABLE XIII.—continued.

No. of Schools.	No. of Scholars.		Books found in each Dame School.
	Age.		
	Under 5 Years.	Above 5 Years.	
30	3	5	Penning's Spelling Book and Church Catechism.
31	7	14	Testament, Carpenter's and Vyse's Spelling, Collections from original Scripture, Watts's Divine Songs.
32	6	6	Bible, Testament, and First Book Catechism, Watts's Divine Songs, Guy's Spelling, and Original Poems for Infants.
33	8	4	Bible and Testament, Vyse's Spelling, Murray's Grammar, Watts's Hymns, Little Primers.
34	6	5	Testament, Vyse's and Mavor's Spelling Books.
35	9	3	Testament, First Step to Knowledge, Alphabets, and a Little Hymn Book.
36	3	5	Testament, Alphabets, and the Universal Spelling Book.
37	5	5	Alphabets, Cards, and one or two old Spelling Books.
38	12	9	Union Sunday School Spelling, Mavor's Spelling, Blair's First Catechism, Pinnock's First Catechism.
39	6	8	Testament, Primers, and Vyse's Spelling.
40	4	10	Bible and Testament, Primers, Universal Spelling Book, and Sunday School Tracts.
41	..	6	Mavor's Spelling, and Murray's Grammar.
42	3	10	Vyse's and Mavor's Spelling and Primers.
43	5	12	Bible and Testament, Cock-Robin's Alphabet, Guy's and Carpenter's Spelling, and Murray's Grammar.
44	5	3	Primer, Child's First Book, Alphabets, and one tattered Spelling Book.
45	..	1	Testament and Guy's Spelling.
46	6	10	Bible and Testament, Universal and Mavor's Spelling Books, and a Little Primer.
47	1	1	Sunday School Spelling Books, Watts's Catechisms and Hymns.
48	11	22	Bible and Testament, Guy's, Vyse's, and Mavor's Spelling, New Guide to English Language, Psalter.
49	7	1	Pink's New ABC, Fairburn's Ditto.
50	1	4	Bible and Testament, Goldsmith's Natural History, Pinnock's Catechisms, Child's and Mavor's Spelling.
51	3	5	Testament, and a tattered Spelling Book.
52	7	3	Bible and Testament, and Vyse's Spelling Book.
53	7	..	Universal Spelling Book.
54	6	..	Testament and Primers.
55	..	17	Testament, and any other books brought by the Children.
56	25	35	Testament, Prayer Book, Vyse's Spelling Book.
57	2	1	Little Primers.
58	2	1	Testament and Vyse's Spelling.
59	4	1	Testament, Vyse's Spelling, Watts's Hymns.
60	5	7	Testament, Vyse's and Universal Spelling, Watts's Hymns, Primers.
61	..	12	Langford's New Universal Primer.
62	..	3	Testament, Guy's and London Spelling, Primers.
63	2	7	Bible and Testament, Alphabets, Primers, Guy's and Universal Spelling.
Total.	296	425	

TABLE XIV.—*List of Schools supported wholly, or in part, by Endowment, Public Subscription, or by Individuals; or attached to a Place of Worship or a Public Institution.*

No.	SCHOOLS.	PARISHES.	Date of Establishment.	Number of Teachers.	AGE.			SEX.		Total Number of Scholars.
					Under 5 Years.	Between 5 and 15.	Above 15.	Boys.	Girls.	
DAY SCHOOLS.										
Instruction Gratuitous to all.										
1	St. Mary's, Female Catholic	St. John's	1819	1	..	90	..	90	90	
2	Male	..	1819	1	..	190	..	190	..	190
3	Green Coat, Male	St. Margaret's	1683	1	..	21	..	21	..	21
4	Black Coat, Male	..	1650	1	..	18	..	18	..	18
5	National Society's Central, Male	..	1811	1	..	340	..	340	..	340
6	Female	..	1811	1	..	154	..	154	154	154
7	Blue Coat, Male and Female	..	1688	2	..	86	..	52	34	86
8	The Grand Khaibar, Male	..	Not known, but more than 100 years.			90	..	90	..	90
9	Westminster, New, Male	..	1795	1	..	50	..	50	..	50
10	Female	..	1795	1	..	50	..	50	50	50
11	St. Margaret's and St. John's Workhouse, Male	..	1837	1	..	107	..	107	..	107
12	St. Margaret's and St. John's Workhouse, Female	..	1837	1	..	79	..	79	79	79
13	Tothill Fields Prison, Male	..	1835	1	..	90	15	35	..	35
14	Female	..	1835	1	..	14	1	15	15	15
Total†				14	..	1299	16	833	422	1255
Instruction Gratuitous to Part.‡										
15	St. Margaret's Parochial, Male	St. Margaret's	1837	..	Not distinguished.		{ 10	..	10	
16	Female	..	1837	..	{		..	8	8	
17	Emery Hill's School, Male	St. John's	1708	1	..	18	..	18	..	18
Total				1	..	18	..	28	8	36
Instruction not Gratuitous.]										
18	Pimlico, British, Male	St. Margaret's	1830	1	..	200	..	200	..	200
19	Female	..	1821	1	..	110	..	110	110	110
20	New Pie-street British and Foreign, Male and Female	..	1836	1	27	23	..	20	30	50
21	Miss Neeve's, Female	..	1824	1	..	96	..	96	96	96
22	Horseferry-road, British, Male	St. John's	1816	1	12	88	..	100	..	100
23	Vincent-square, Male and Female	..	1834	3	..	154	..	76	78	154
Emery Hill's, Male, above mentioned (No. 17)			..	..	..	7	..	7	..	7
Westminster New, Male (No. 11)			..	..	..	1	..	1	..	1
Female (No. 12)			..	..	..	2	..	2	..	2
St. Margaret's Parochial, Male (No. 15)			..	1	Not distinguished.		{ 46	..	46	
St. Margaret's Parochial, Female (No. 16)			..	1	{		..	28	28	
Total				10	..	..	..	450	344	794
Total of Day Schools, 23				25	..	..	..	1311	774	2085

* The School No. 8 is attached to No. 7, and under the same Teachers; but the Scholars are taught and sit separately from the rest.

† Lady Dacre's School is omitted for the reason stated in note at page 201.

‡ Only the number taught gratuitously is stated.

§ The ages of those taught gratuitously are not distinguished.

¶ The rate of payments in the two first of these schools is 1s. per month; in the rest the payment is weekly, viz., in the third 1d.; in the fourth 1d. and 2d.; in the fifth 3d.; in the sixth 2d.; in the seventh 8d.; in the eighth and ninth 6d.; and in the two last 2d. and 3d.

TABLE XIV.—continued.

No.	SCHOOLS.	PARISHES.	Date of Establishment.	Number of Teachers.	AGE.			SEX.		Total Number of Scholars.	
					Under 5 Years.	Between 5 and 15.	Above 15.	Boys.	Girls.		
INFANT SCHOOLS.											
Instruction not Gratuities.*											
1	Pimlico	St. Margaret's	1834	1	70	..	..	50	20	70
2	Dacre-street . . . . .	..	1836	1	34	40	..	34	40	74
3	Miss Neave's . . . . .	..	1834	1	42	33	..	40	35	75
4	Tufton-street National Society's	St. John's . .	1834	1	80	70	..	80	70	150	
5	Vincent-square . . . . .	..	1837	3	84	10	..	54	40	94
6	.. . . .	..	1819	3	103	65	..	93	75	170
Total	10	415	218	..	353	280	633
SUNDAY SCHOOLS.†											
1	Queen-square Episcopal Chapel } Sunday School	St. Margaret's	1837	4	3	37	..	15	15	30	
2	Pimlico Male Sunday School	..	1806	30†	..	234	6	240	..	240	
3	.. Female	..	1806	27	..	233	..	..	233	233
4	Buckingham Chapel Infant } Sunday School	..	1834	..	176	36	..	114	98	212	
5	Buckingham Chapel (Branch) } Infant Sunday School	..	1834	..	Not distinguished.			55	45	100	
6	Sabbath Class of Young Men	Commenced Revived	1832 1837	1	guished.			19	..	19	
7	New Pie-street Sunday School	St. Margaret's	1837	5	15	30	..	90	25	45	
8	Blue Anchor-yard ..	..	1835	5	3	62	..	28	37	65
9	Westminster ..	..	1809	18	20	185	..	95	110	205
10	St. John's Auxiliary ..	St. John's . .	1834	13	..	157	..	76	81	157	
11	.. Sunday School ..	..	1818	30	..	389	..	147	212	359
12	Romney Street ..	..	1817	19	..	123	17	50	90	140
13	Wesleyan Connexion . . . .	..	1814	30	220	110	..	180	150	330
Total	182	437	1556	23	1032	1096	2128

* The payments in all these schools are 1d. and 2d. a week.

† The first, ninth, tenth, and eleventh of these schools are connected with the Established Church; the second, third, fourth, fifth, sixth, and seventh, with congregations of Independents; the twelfth with a congregation of Baptists; the thirteenth with the Wesleyan connexion; and the eighth with a congregation whose religious opinions are not distinctly defined in the report.

‡ These 30 Teachers are distributed over the second, fourth, and fifth schools.

§ Including 112 whose ages are not distinguished.

|| Of these 1542 also attend day-schools.

TABLE XV.—SUNDAY SCHOOLS.—Size of Sunday Schools.

Number of Sunday schools in which the scholars on the books do not exceed 100	5
Number of Sunday schools in which the scholars on the books do exceed 100	8
The average attendance does not exceed 100	5
„ „ does exceed 100	8
	13

TABLE XVI.—SUNDAY SCHOOLS.—Date of Establishment.

	Schools.		Scholars.
In or before 1820	6	with	1507
From 1821 to 1830	None		..
Since 1830	7	„	621
Total	13		2128

TABLE XVII.—SUNDAY SCHOOLS.

Summary of Sunday Schools, and of the Scholars on the Books and in Average Attendance.

RELIGIOUS DENOMINATIONS.	Number of Schools.	SCHOLARS.						Average Attendance.	Per Centage of Attendance on the Books.	Average Number of Scholars in Attendance to a School.
		AGE.			SEX.		Total Number of Scholars on the Books.			
		Under 5 Years.	Between 5 and 15.	Above 5 Years.	Boys.	Girls.				
Church Establishment	4	23	728	..	333	418	751	579	77·0	145
Independent	6	191	645	6	441	401	842	439	52·1	73
Wesleyan Connexion.	1	220	110	..	180	150	330	220	66·6	220
Baptist	1	..	123	17	50	90	140	105	75·0	105
Dissenter not defined	1	3	62	..	28	37	65	30	46·1	80
Total	13	437	1668*	23	1032	1096	2128	1878	64·5	105
Number of Children attending Day Schools also }	..	332	1210	..	760	782	1542	..	..	..

* In this column are included 112 whose ages are not stated.

TABLE XVIII.—Statement of the Number of Scholars to a Teacher.

Denominations.	Schools.	Teachers.	Scholars.	Average Number of Scholars to a Teacher.
Established Church . .	4	65	751	11½
Independent	6*	63	842	13½†
Wesleyan Connexion . .	1	30	330	11
Baptist	1	19	140	7½
Dissenter not defined . .	1	5	65	13
Total	13	182	2128	11½

* One of the Independent schools is an Infant school, and another a Sabbath Evening school.

† This average is exclusive of the Evening school.

TABLE XIX.—SUNDAY SCHOOLS.

Employment of School Hours.

In 1 school.	Total Time in School. 1 hour.	Time devoted to direct Instruction. 0½ hour
1	2	1
1	3	2
1	3	2½
1	3½	2½
1	4	2½
1	4	3½
4	4	4
1	4½	3
1	5	3½

TABLE XX.—SUNDAY SCHOOLS.

General Mode of Conduct.

In 9 out of 13 schools there are appointed visitors.

Examinations are held yearly in 2 schools, quarterly in 3, and occasionally in

2. In 6 no examinations whatever are held.

The monitorial system is followed in 7, and not followed in the remaining 6.

In all the 13 schools the children are questioned in what they learn.

TABLE XXI.—SUNDAY SCHOOLS.

Libraries and Societies attached to Sunday Schools.

A Lending Library is attached to 3 schools.

A Clothing Society is attached to 2 schools.

A Lending Library and Clothing Society are attached to 3.

The nature of the Clothing Societies is not clearly explained in all the returns.

In two of the schools in the last class it consists of a private subscription among the teachers to supply shoes, &c., to those children who would be otherwise prevented from attending the school through want of such clothing.

TABLE XXII.

DESCRIPTION OF SCHOOLS.	St. John.		St. Margaret.		Total.		TOTAL OF DISTRICT.							
							Age.			Sex.		Per Centage		
	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Under 5.	Between 5 and 15.	Above 15.	Males.	Females.	Of the Total Number of Sunday Scholars.	Of the Total Number of Scholars.	
SUNDAY SCHOOLS.														
Church of England.....	2	516	2	235	4	751	32	728	..	333	415	36.80	..	
Protestant Dissenters.....	2	470	7	307	9	1377	414	940	28	699	678	61.70	..	
Total.....	4	986	9	1142	13	2128	497, or 20.54 per cent.	1668, or 78.33 per cent.	78, or 1.08 per cent.	1032, or 48.97 per cent.	1096, or 51.03 per cent.	100	29.00†	
Returned also as Day-scholars..	..	608	..	329	..	1342	306	1310	..	700	738	73.46	26.06	
Receiving Sunday School Tuition only.....	..	373	..	313	..	686	105	456	28	278	314	27.54	10.13	
DAY SCHOOLS.														
Daughters Schools.....	20	349	32	372	52	721	120	423	..	228	425	..	12.47	
Common Day Schools.....	25	618	16	342	41	960	183	786	8	606	460	..	16.90	
Middle Schools.....	11	329	9	273	20	602	30	1350	23	348	254	..	10.41	
Superior Schools.....	2	78	2	16	4	94	..	86	..	78	18	..	1.54	
Children in Charity, &c. Schools, but paying.....	..	7	..	8	..	15	..	10	..	8	8	..	17	
Supported solely by the Scholars	68	1608	60	1006	128	2615	501	1948	30	1210	1165	..	41.07	
Infant Schools assisted by the Public.....	3	414	3	219	6	633	415	218	..	359	280	..	10.95	
Charity and Endowed Schools	5	558	18	1526	23	2075	60	1999	16	1908	772	..	35.88	
Supported or aided by Charity.	6	968	21	1742	27	2708	475	2317	16	1656	1692	..	46.83	
Total.....	76	2233	81	2748	157	5063	976, or 19.29 per cent.	4605, or 90.00 per cent.	48, or 0.90 per cent.	2800, or 55.38 per cent.	2217, or 43.62 per cent.	..	27.90	
Evening Schools.....	7	51	6	68	13	119	..	1708	11	88	76	..	1.97	
Total number of Schools and Scholars.....	87	2750	96	3024	170	5783	1061, or 18.70 per cent.	4626, or 80.00 per cent.	76, or 1.30 per cent.	3176, or 54.93 per cent.	2607, or 45.06 per cent.	..	100	

* Of this number are 67 boys and 45 girls whose ages have not been ascertained.

† These figures show the proportion of the total number of Sunday scholars, 2128, to the total number of day and evening scholars.

‡ In this number are included 2 boys and 8 girls whose ages were not ascertained.

§ In this number are included 11 boys and 29 girls whose ages were not ascertained.

On the Sickness and Mortality among the Troops in the West Indies.
Prepared from Official Documents, by CAPT. A. M. TULLOCH, F.S.S.,
&c. &c. Part II., embracing the Jamaica, Bahamas, and Honduras
Commands.—(Continued from p. 142.)

II.—THE JAMAICA COMMAND.

THIS island lies about 900 miles to the west of the Windward and Leeward chain, in latitude $17^{\circ} 35'$ to $18^{\circ} 30'$ N.; and longitude 76° to $78^{\circ} 40'$ W.; and extends 170 miles in length from east to west, and about 50 in its broadest part from north to south. Throughout its whole length there runs a lofty range of mountains, from 7000 to 8000 feet in height, forming a complete barrier between the north and south sides, except where intersected by two defiles, through which communications are established. Each side of the island presents considerable diversity in physical aspect. On approaching the south, the immense mass of the Blue Mountains at once bursts on the view; their summits a succession of abrupt precipices, intersected by deep chasms and gulleys; the lower range crowned with wood, less rugged in their outline, intersected by wider valleys, and ultimately terminating in a long plain, from 8 to 12 miles in breadth, which extends from their base to the ocean. On this level tract, or in its immediate vicinity, the principal towns and largest military stations are situated; the soil is of a rich brick-coloured mould, exceedingly fertile, and watered by numerous rivers, intersecting it in almost every direction.

On the north side there are few plains or level surface of any extent; the ground rises at once from the sea by a succession of gentle acclivities, separated by wide valleys; the hills are rounded on the top, and studded with thick groves of the pimento tree. These features gradually become bolder in their outline till they join the high range in the centre of the island, where they are covered with immense forests of cedar. The soil on this side is generally a chalky marl, producing a rich verdure, similar to that of an English lawn, and watered by an immense number of rivulets and cascades.

The interior of the island has quite a different appearance from either side, presenting all the varieties of feature peculiar to a highland district; in some parts rugged, difficult of access, and densely wooded; in others spreading out into a wide expanse of table land or elevated plain, from which rise a number of small hummocks, giving a slight undulation to the surface. The ground in such spots is generally clear and open, covered with rich grass, and of a pastoral character. These regions, in which cultivation has made but little progress, are principally used for the rearing of cattle.

As these portions of the island present varieties in physical aspect, so they exhibit a corresponding diversity in climate. On the plains or sea-coast of the south side, the thermometer at noon does not vary more than 8° or 9° throughout the year, its greatest height being about 92° , and the lowest 83° . The mid-day heat on both sides of the island is greatly modified by the influence of the sea breeze, which generally sets in from the eastward about 8 or 10 o'clock in the morning, increases in

force till about 2, and declines with the sun, until, on the approach of evening, it is succeeded by the land wind from the mountains. When these winds become less regular, or altogether fail, as is sometimes the case before the rainy season, the atmosphere is exceedingly oppressive to the feelings, though the thermometer perhaps exhibits but little change in the temperature. The quantity of rain which falls throughout the year is about 50 inches.

The high lands in the interior of the island possess a very different climate from that of either side, their great elevation producing a corresponding diminution of temperature, which would be still more perceptible, were it not that the sea breeze, which modifies the heat of mid-day in the low country, does not extend to the mountains, and is even but partially felt at the distance of a few miles from the coast. It is consequently in the morning and evening that the diminution of temperature is most felt in the high grounds; at which periods it sometimes exceeds 25°.

In this island almost any variety of climate may be procured. At a residence 4200 feet above the level of the sea, the range of the thermometer is from 55° to 65°; in the winter it falls even as low as 44°. There the vegetation of the tropics disappears, and is supplanted by that of temperate regions. Showers are common in the interior almost throughout the whole year, but they do not fall with the same violence as in the plains, and the quantity of rain appears to be less. The air is exceedingly humid, subject to dense fogs, and those rapid alternations of temperature peculiar to all mountain regions.

The troops here, as in the Windward and Leeward Command, consist of White and Black Regiments. The details of the latter will be hereafter adverted to: of the former the numbers employed have varied from 1895 to 3285, according to circumstances; the average garrison has been 2578. The number who have died in the course of 20 years has been 6596, exhibiting an average annual mortality of 128 per thousand; and it is rather remarkable that, if the mortality from 1803 to 1816 be taken on the same principle, it amounts to 127 per thousand, so that the climate has presented exactly the same fatal character ever since 1803. Even so far back as 1655 the deaths among the troops during the sickly season amounted to 140 per week, and, some years later, out of 800 who arrived two-thirds died within a fortnight.

Of the 6596 deaths recorded between 1817 and 1837, the causes and place of decease of 6254 only can be ascertained: the rest consist of accidental deaths, or of those which took place on detachment where there was no medical officer to record the disease.

An investigation into the extent of mortality at each station shows that all are by no means equally unhealthy; nay, some approach in salubrity to the climate of Britain.

The following Table sufficiently establishes this fact, as well as demonstrates the extremely variable character of the climate, by showing the relative influence of mortality in each year, at the principal stations throughout the island.

Years.	Out of every 1000 Troops at the undermentioned Stations the following proportions have died in each year from 1817 to 1836 inclusive.										Average of whole Command.
	Up-Park Camp.	Port Royal.	Fort Augusta.	Spanish Town.	Stoney Hill.	Port Antonio.	Falmouth.	Montego Bay.	Maroon Town.	Lucas.	
1817	83	39	34	128	97	192	74	89	None.	71	88
1818	65	50	33	278	37	89	67	87	10	95	89
1819	501	316	103	68	301	346	130	..	12	79	294
1820	160	58	92	273	50	84	192	..	29	45	153
1821	130	225	44	91	45	219	53	..	26	41	116
1822	443	205	51	242	47	52	117	51	30	76	171
1823	82	83	31	200	25	51	24	..	35	87	63
1824	45	100	81	207	30	194	52	217	38	64	84
1825	341	321	58	399	453	..	184	..	30	178	307
1826	72	94	61	186	18	..	227	..	21	43	80
1827	225	155	280	164	287	94	233	..	30	30	224
1828	118	18	84	82	37	147	61	212	41	12	74
1829	43	82	70	51	13	233	51	109	15	35	62
1830	120	148	42	124	18	135	86	..	58	350	97
1831	110	34	79	236	174	124	255	..	48	..	133
1832	91	32	24	57	72	185	75	358	67	167	111
1833	78	39	56	67	31	226	70	174	81	35	86
1834	70	107	51	155	35	173	95	121	16	26	93
1835	52	36	70	194	34	117	84	54	4	25	75
1836	51	9	60	144	21	25	38	348	29	160	61
General Average	140.6	113.1	73.5	162.4	90.2	149.3	102.6	178.9	32.7	84.9	121.3

Without stating the strength, it would have been of no use to have given the exact numbers who died at each station, but they will be found in the Report itself, whereof this is a Summary, as well as the diseases by which the mortality took place at each, and of which the following Table exhibits the results in annual ratios.

	Annual Ratio of Mortality per 1000 of White and Black Troops serving at each of the following subordinate Stations.										Ratio of Mortality per 1000 of White Troops serving throughout the Island.
	Up-Park Camp.	Port Royal.	Fort Augusta.	Spanish Town.	Stoney Hill.	Port Antonio.	Falmouth.	Montego Bay.	Maroon Town.	Lucas.	
By Fevers	181.5	93.9	55.5	141.1	170.5	136.6	80.7	150.7	15.3	63.2	101.9
Diseases of Lungs . . .	8.5	7.3	9.7	9.1	6.5	5.2	8.7	7.9	6.3	10.2	7.5
" Liver	8.8	1.6	3	3	1.9	1.2	1.6	..	3	6	1
" Stomach and Bowels . .	5.8	5.9	3.2	4.8	5.8	6.9	2.6	5.6	3.7	4.5	5.1
" Brain	3	2.4	1.3	2.7	1.2	2.8	4.8	10.2	1.3	1.9	2.6
Dropsies	8	6	7	1.6	1.9	2.4	2.6	1.1	2.4	1.9	1.2
All other Diseases . . .	1.7	1.4	2.7	1.8	2.4	4.8	2.3	2.4	3.4	2.6	2
Total	140.6	113.1	73.5	162.4	90.2	149.3	102.6	178.9	32.7	84.9	121.3

From this table it will at once be seen how different is the influence of these diseases at different stations. At Maroon Town, for instance,

only 15 per thousand died annually from fever, on the average of the last 20 years, and the greater part of these were invalids from other stations; while at Spanish Town, on the average of the same period, 141 per thousand died annually from the same cause. We find too that at Maroon Town, in the mountains, diseases of the lungs prove one-half less fatal than in the stations in the plains.

This remarkable difference in the influence of these diseases in the same island naturally leads to the enquiry whether there is any thing in the localities to induce them at some more than at others, and in this will be found several striking contradictions to the usual theories on the subject.

Up-Park Camp.—This station, for instance, is about two miles north of the sea-port of Kingston, and lies at the eastern extremity of a well-cultivated and fertile plain, having a gradual slope towards the sea. About a mile to the north is a mountain ridge, the foot of which is slightly wooded, and four or five miles to the eastward extends another of greater elevation, but of which the surface is clear and open. There is no marshy or swampy ground nearer than three or four miles, and the soil is of so absorbent a nature, that it is necessary to dig to a considerable depth before water can be procured.

The Camp is elevated 200 feet above the level of the sea, and enjoys the advantage of a regular sea and land breeze, the former during the day, and the latter during the night, which reduce the temperature considerably below what prevails at most of the other stations.

The barracks are excellent, and by far the best in the island; yet no station has suffered more from those dreadful epidemic fevers by which this island is frequently visited. In 1819 half the force was cut off; in 1822, nearly the same proportion; in 1825, a third, and in 1828 a fourth perished, all by the same fatal malady.—Some details of these extraordinary epidemics may here prove interesting.

The 50th regiment was sent to this station on its arrival in the island in March, 1819, and the 92nd regiment on its arrival in June following. In the early part of that year the epidemic, or yellow fever, had shown itself to a considerable extent both here and at Port Royal, and in the end of June several cases appeared in these newly-arrived corps. As it was supposed this might have been occasioned by their being overcrowded, detachments were sent to Stoney Hill and Fort Augusta; but, notwithstanding this precaution, by the end of July the fever had rapidly increased, and continued to rage with such appalling violence during the greater part of August, that scarcely a man of either corps escaped being attacked by it, and nearly one-half of their number perished. The garrison was then entirely broken up and removed to Stoney Hill, Fort Augusta, and His Majesty's Ship *Serapis*, a sufficient guard only being left to take charge of the stores. In the middle of November the troops were landed from the *Serapis*, and the garrison re-assembled from Fort Augusta and Stoney Hill. The disease continued, but with diminished virulence, till December, when it disappeared at this station.

That this disease spared neither age, sex, nor condition, is pretty evident from the following abstract of the deaths caused by it in each corps at this and the other stations to which they were sent in the course of the year.

<i>92d Foot.</i>	Strength.	Died.	<i>50th Foot.</i>	Admitted.	Died.
Commissioned Officers .	27	10	Commissioned Officers.	30	11
Officers' wives	5	4	Soldiers.	769	231
Soldiers	650	275	Soldiers' wives	90	30
Soldiers' wives	60	29	Soldiers' children . . .	50	33
Soldiers' children . . .	70	38			

We cannot furnish the strength of each class in the 50th regiment, nor the admissions of each class in the 92d regiment, but the above is sufficient to establish that all suffered in nearly an equal degree. In the latter the proportion of deaths to admissions was about 1 in 3, and the number of admissions considerably exceeded the whole strength, so that several must have been attacked twice.

That advanced age, hardy constitution, or previous service in a warm climate had no effect in counteracting the operation of this disease, is sufficiently apparent from the fact that the 92d regiment, composed of hardy veterans who had served through the Peninsular Campaign, suffered considerably more than the 50th, which, with the exception of 40, was composed of young men recently enlisted.

Though several detachments of both corps were sent from this station to Stoney Hill between July and October, the disease did not manifest itself there till November, and then did not prove quite so fatal as at this station.

The greater part of that year was exceedingly sultry, there was a want of the usual supply of the early rains, and the country is described as being much parched up when the fever broke out; but the changes of temperature or moisture which took place during the months in which it prevailed, seem to have had no perceptible effect either in diminishing its prevalence or intensity.

In the latter end of 1821, and the beginning of 1822, the epidemic fever prevailed among three companies of the 50th regiment at this station to so great an extent, that about a fourth part of them was cut off: no detail is given of the circumstances under which it commenced, or of the state of the weather at that period, from which we may conclude there was nothing remarkable in either. In July these companies were marched to Stoney Hill to make way for the head-quarters of the 33rd and 91st regiments, then just arrived from England, who immediately began to fall victims to the same fatal disease; for between their arrival and the middle of May, when they were all removed from the station, the number attacked nearly equalled the whole strength of the garrison, and of these 155 died. In this instance, too, it was strikingly exemplified that neither age, sex, nor condition, could boast of any exemption, as will appear from the following details:—

The 33d lost
 4 Officers out of 21.
 8 Women out of 57.
 17 Children out of 74.
 67 Soldiers out of about 250.
 There were four companies at Stoney Hill out of the range of the epidemic.

The 91st lost
 4 Officers out of 20.
 8 Women out of 71.
 10 Children out of 62.
 88 Soldiers out of about 350.
 There were two companies at Stoney Hill out of the range of the epidemic.

This epidemic prevailed also to a considerable extent at Spanish Town and Port Royal.

The fever of 1825, which cut off a third part of the troops at this

station, did not originate here, but seemed rather to have been a sequence of that which broke out with such violence at Stoney Hill, and prevailed so generally throughout the island. The principal circumstance worthy of remark in regard to it was, that at Stoney Hill it broke out about the middle of February after a long continuance of dry sultry weather, when the ground was excessively parched, and as the drought increased, so did the disease; whereas at Up-Park Camp it broke out in the month of June, after the rains had commenced, and continued with unabated severity during a period when more rain fell than had been witnessed for 20 years previous, and as the rain increased so did the disease.

The epidemic of 1827, by which about a fourth part of this garrison was cut off, commenced at Fort Augusta, where it raged with great violence during the month of August, and subsequently extended itself to Up-Park Camp: the particulars of its origin and progress will be found in the details of Fort Augusta.

Port Royal.—This town is built at the south-west extremity of a narrow sandy peninsula about ten miles in length. The ground is a perfect level, often covered with water during heavy rains, and high tides; the soil is gravel and sand; and the town has, from its position, free ventilation and reduced temperature, rarely subject to sudden alternations. The preceding tables show that it has proved by no means so unhealthy as Up-Park Camp; and that though on two occasions about a third part of the force was cut off by yellow fever, the mortality in 1836 was lower than in Britain, being under one per cent.

Fort Augusta.—This post lies about four miles from Kingston, and at nearly an equal distance from Port Royal; it is built on the extremity of a low neck of land or peninsula, forming the north-west boundary of Port Royal Harbour, and almost surrounded by the sea. In the vicinity, indeed almost under the very walls of the Fort, is an extensive marsh or lagoon, through which the river Cobre, a sluggish stream, empties itself. This marsh is interspersed with several small islets covered with mangrove bushes, and abounding in every species of decayed vegetation, from which issue most offensive effluvia when the wind comes from that quarter. The soil of the peninsula is sandy, and has a coral formation for its base.

The position of this station would lead us to suppose it the most unhealthy in the island, whereas experience has proved it to be the reverse: the mortality has been only about half the general average, and of this a large proportion took place at Kingston, to which Fort Augusta furnishes a detachment. Deducting the sick from that station the mortality was only about 50 per 1000.

The mortality by fevers, even including the large proportion from Kingston, is only half the general average of the island. While the epidemics of 1819, 1822, and 1825 were raging in the vicinity, this station in a great measure escaped their influence, and it was only by that of 1827 that it suffered severely. The 84th regiment arrived here in February of that year, and enjoyed such a remarkable degree of health, that only one death took place in the whole corps within six months; but in July, fever began to show itself among them, without any apparent cause to induce it, except that the barracks were rather

crowded at the time. In the hope of checking its progress by better accommodation, a part of the corps was sent to Up-Park Camp; and this change at first seemed to have a good effect, but towards the middle of August, sickness rapidly increased, and numbers daily became its victims. The Fort was then evacuated, and the troops moved to an encampment at Airey Castle, a few miles off, which had some effect in checking the disease; but unfortunately wet boisterous weather set in, the tents were blown down, and the sick being exposed for several hours to its inclemency, twenty of them perished in one night; temporary huts were afterwards erected, and so soon as the troops were comfortably accommodated in them, the disease disappeared. During the short time it continued at its height, it proved more rapidly fatal than on any previous occasion, 112 out of about 800 having been cut off in the short space of one month. When the disease abated here, it broke out with renewed violence at Up-Park Camp, and Stoney Hill, where it proved nearly as fatal.

After the return of the corps to the Fort, several cases again occurred, but at length the disease gradually disappeared. On this occasion there was an apparent exemption in favour of the women, children, and officers, only about a fifth of them having been cut off, while about two-fifths of the men perished; but so many changes in the quarters of the corps took place at this period, that we have no means of knowing whether they were all equally exposed to the exciting cause of the disease.

Notwithstanding the equable nature of the temperature, diseases of the lungs prove considerably more fatal here than at most other stations in the island, while those of the bowels are proportionably lower; without there appearing any cause to which such peculiarities can be traced.

Spanish Town.—This town, the capital of Jamaica, lies about five or six miles distant from the sea, and sixteen from Kingston; it is situated at the eastern extremity of an extensive plain, surrounded by mountains on the north and west, and by uncultivated waste tracts of land on the south and west. The mountains to the north approach within a few miles of the town, and form part of a lofty chain intersecting the island, and of great elevation. Those to the westward and eastward are a continuation of the same range, but less elevated, and form gentle undulations to the southward, where they run into the plain. The town is said to be extremely dirty, badly drained, and, whether from that or its situation, the inhabitants are at all times very subject to febrile diseases. The Cobre, a sluggish river of considerable depth, passes at the distance of about a quarter of a mile. The soil in the immediate neighbourhood, which is of a clayey tenacious nature, is barren and unproductive, and after heavy rains produce partial swamps. The country as far as the foot of the mountains being a dead level, and no artificial means being employed to carry off the superabundant moisture, the latter remains until evaporated by the sun's rays, and when the land-winds blow over the ground thus saturated, they are supposed to have considerable influence in the production of fevers.

The sea breeze, which tends so much to modify the heat at other stations, is here very irregular: indeed from August to October it is often

scarcely perceptible; the temperature during the day is consequently much higher than at the other stations, but at night a cold wind sets in from the mountains, which often reduces the thermometer twenty degrees in the course of a few hours, and though pleasant, causes too rapid a transition to be beneficial to the constitution.

This is an extremely unhealthy station for troops, scarcely a year elapses without a fifth part of the force being cut off, and in some years more than two-fifths have perished; the average mortality on a long period of 20 years having been 162 per 1000. It has been equally unhealthy ever since 1780, when it was estimated that a third part of the garrison died annually. The epidemics of fever have been too numerous at this station to admit of any particular details regarding them being inserted in this place.

Stoney Hill.—This post is situated about nine miles from Kingston, on a lofty eminence in the Liguanea Mountains, 1360 feet above the level of the sea, commanding the grand pass which there intersects the island from north to south. The hill on which the barracks are built is flat on the top, and lies between the ends of two high mountain ridges, that on the south-east being upwards of 8000 feet high, and the other on the west considerably lower.

To within the distance of a few hundred yards the garrison is surrounded by brushwood, which gradually rises into thick standing wood; the soil is for the most part of a reddish clay mixed with sand, but from the elevated nature of the ground, the rain never lodges in any quantity, and there are no marshes or swamps in the vicinity; about a mile to the east runs a small stream, from the banks of which there generally rises at night a dense fog, producing an unpleasant dampness, but not supposed to be otherwise hurtful.

At mid-day there are only a few degrees difference in temperature between this and the low grounds, but it is liable to more sudden alternations, and the nights are much more cold and damp. The thermometer in the hot months is generally 74 at six o'clock A. M., 82 at two P. M., and 80 at six P. M.; in the cool months it is 68, 75, and 73, at corresponding hours. The land wind ceases about nine o'clock in the morning, and as the sea breeze does not reach the station till eleven or twelve, the interval is frequently hot and oppressive.

The average mortality of the troops here is about 90 per thousand annually; but the salubrity of this station is subject to great irregularities. In some years, or for several years successively, there is little, if any, fever; in others it is just as prevalent as in the low grounds, though the epidemics generally break out at different periods of the year. For instance, in 1819, when the disease was raging at Up-Park Camp, though detachments were constantly arriving from that station between July and October, it never appeared during that period; but in the commencement of the latter month, when it was almost eradicated there, it broke out with great violence among five companies of the 50th and 92d, of whom it cut off nearly one-third. In 1822, also, the troops here were very little affected by the fever, which prevailed to such an extent at Up-Park Camp, although large detachments arrived from that station when the disease was at its height. Between 1819 and 1825, this garrison continued to enjoy good health; but in February of the latter

year, after a long drought, when the surface of the country was exceedingly parched and arid, and water could scarcely be procured, epidemic fever suddenly made its appearance, and during March and April raged with dreadful violence, continuing its ravages till the end of May, when after the rains had set in for four weeks, it assumed a milder character. From this period to the beginning of July very few cases occurred; but in that month it again broke out with renewed violence, and continued with little abatement till November, when the corps embarked for the north side of the island.

At the commencement of the epidemic the troops at Stoney Hill did not exceed 418; in the month of March 200 of these, who had not been attacked by fever, were sent to Fort Augusta and Up-Park Camp, where for a time they continued healthy. In June, however, in consequence of the disease having broken out at Up-Park Camp, and moderated at this station, those who had been sent there returned, and when it reappeared among them in August, about 100 of the survivors were, as a last resource, encamped on the hill, but without any decided effect. The disease continued to linger at the station till the end of the year, and then seemed only to wear out for want of fresh victims. The total number of troops at the station does not appear to have exceeded 300, except for a few weeks at the commencement of the epidemic, and yet of that small number 184 were cut off, and 11 officers out of little more than 20, in the course of eight months.

The epidemic of 1827 prevailed here principally during the months of October and November, after it had ceased at Fort Augusta; but there seems to have been no peculiarity attending it worthy of notice. In 1831 this station again suffered from fever, though not to so great an extent as on the previous occasions, only about a seventh part of the force having died; it commenced in August, and continued till October, when it assumed a milder form, and gradually disappeared. During this period the weather was remarkably foggy, with frequent heavy rains; and, as it began to clear up, the disease moderated. The proportion of deaths to admissions on this occasion was about one in four, and all classes were alike affected.

By contrasting the position, mortality, and fatal diseases of this station and Fort Augusta, we have a striking instance how imperfectly we can appreciate the cause of disease, or predicate, with any degree of certainty, whether one locality is likely to prove more healthy than another. Fort Augusta is situated in the midst of a marsh or lagoon, abounding with that decayed vegetable matter which is supposed to be a most fertile source of fever, while Stoney Hill is 1360 feet above the level of the sea, and free from any such cause of disease; yet the deaths by fever have not only been higher than at Fort Augusta, in the proportion of 70 to 56, but this station has suffered from four severe epidemics, while Fort Augusta, although in the immediate vicinity of Port Royal, Kingston, and Up-Park Camp, where that disease is so prevalent and so productive of mortality, has been comparatively exempt from all but that of 1827.

In like manner, were we to be guided by the usually received opinions in regard to diseases of the lungs, we should have been led to suppose, that in a position so elevated, so liable to frequent alternations of

temperature, and with so damp and foggy an atmosphere as Stoney Hill, that class of diseases would create much greater mortality than at Fort Augusta, where the temperature is so equable and the situation less exposed to sudden atmospheric vicissitudes; whereas we find the very reverse to be the case, as diseases of the lungs occasion a mortality of nine and a half per thousand annually of the garrison of Fort Augusta, and but six and a half per thousand of the garrison of Stoney Hill.

Port Antonio.—The town of Port Antonio is situated at the north-eastern extremity of the island, 80 miles from Kingston, and lies in a hollow, surrounded by an amphitheatre of thickly-wooded hills. Fort George, in which are the barracks for the troops, is built at the extremity of a peninsula nearly surrounded by the sea, and, though possessing no great elevation, it has from its position a tolerably free exposure to the breeze.

On each side of this peninsula are two harbours for the shipping; that on the eastern side enjoys a comparatively healthy locality, but that on the west is sheltered by a thickly-wooded hill, which impedes ventilation; and there is a considerable space of level ground generally inundated by the tide, which, at low water, is left in a marshy state, and when acted on by the sun, emits exhalations, said to be both offensive and unhealthy.

With the exception of the year 1836, the mortality at this station has been always extremely high; the average of 20 years has been 149 per thousand. Yellow fever prevails here almost every year, and the preceding Tables will show that on four different occasions upwards of a fifth part of the force was cut off in one year, and in 1819 upwards of a third. Fever is here said to prevail more in long droughts than in wet weather, which is the reverse of what is generally observed in other parts of the island.

Falmouth.—This town is situated at the root of a peninsula stretching into a bay which forms the harbour of Falmouth. From its position it is well exposed to the breeze, but on every side except towards the sea is surrounded by a marsh communicating with the ocean, and frequently covered at high water; on the reflux of the tide there is generally accumulated a large quantity of mud, leaves, and other vegetable matter, producing a most offensive effluvia during the land wind. Though the soil is sandy with a rocky substratum, yet from the low situation of the town, it is impossible for the water in many places to drain off, so that after heavy rains pools are formed which remain till evaporated. About half a mile from the town on the south a sluggish river empties itself into the sea; its banks are low and muddy, and are generally overflowed during heavy rains. The nearest hills are about three miles to the south, from which they stretch towards the sea in a westerly direction, at the distance of eight miles; the intervening country being a complete marsh communicating with the sea, and covered with low trees and brushwood: the air of the station is consequently damp, the soil wet, and decayed vegetable matter abundant. The well water is so bad that the supply for the use of the troops and inhabitants has to be brought from the river.

There is no station in the island which, from the nature of its locality, might be expected to have a higher rate of mortality than this, yet the deaths among the troops here have been considerably under the average of the rest of the island, being only 103 per thousand annually, which is

lower by 40 per thousand than at Up-Park Camp, with all its apparent advantages of situation.

Montego Bay.—This post has only been occasionally occupied by our troops, and we possess no very particular account of the locality, except that it is built at the extremity of a bay, with a high range of mountains in the rear, obstructing the breeze and rendering the heat extremely intense. It is notoriously unhealthy; the average mortality has been 179 per thousand, and seldom has a year passed without a third or fourth of the detachment there quartered being cut off.

Maroon Town.—This post is situated on a high range, called the Trelawney Mountains, in the interior of the island, upwards of 2000 feet above the level of the sea, and lies about 20 miles south of Falmouth, and 18 west of Montego Bay. It is surrounded on all sides but one by still loftier mountains, clothed to the summit with stately trees exhibiting every variety of foliage. The view is open to the north-east, and exhibits a vast expanse of sea and land scenery. The surrounding hills abound with springs of excellent water, and this post is said to possess every advantage which can conduce to health, or render residence in a tropical climate desirable.

Being surrounded by high mountains the climate is variable, and the temperature liable to sudden transitions. There is much rain, and the evaporation subsequently caused by a tropical sun produces frequent and dense fogs. The thermometer seldom rises higher than 80°, and sometimes in winter at night and towards dawn it is as low as 52°. The soil is a deep red clayey loam, extremely tenacious, rendering it almost impracticable to walk out for some hours after a shower, and retaining moisture for a very considerable time, being much the same in this respect as the soil in the neighbourhood of Spanish Town.

This station is by far the healthiest in the island; the mortality on the long average of 20 years has amounted to only a fourth part of what generally prevails throughout the island, and a large proportion even of that has originated from disease not contracted at the station. During several years in which troops were not permanently quartered at Montego Bay, it was customary to send detachments there from Maroon Town during the negro holidays, and these always brought back a large proportion of sick, and many fatal, cases. The detachments at Falmouth and Lucea too, when sickly, have occasionally been relieved by healthier corps from this post, and it has sometimes happened that the troops sent to Maroon Town had previously been suffering under a great mortality in other parts of the island, and brought with them many sick in a dying state. After a diligent investigation it appears that from 30 to 40 of the deaths included in the above table may fairly be attributed to one or other of these causes, so that the actual mortality of the station has not exceeded 22 per thousand of the force annually, being the same as among the Foot Guards in London on the average of the last seven years.

Nor has this remarkable salubrity been confined to the period embraced in this Report, but ever since British troops were quartered at Maroon Town it has borne the same high character; as an instance of which we may mention, that from 1st September, 1795, to 30th April, 1797, when about 220 of the 83rd foot were quartered there, they lost only 12 men, six of whom were brought from Montego Bay in bad health; so that the actual mortality of the station during these two years could not

have exceeded $1\frac{1}{2}$ per cent., being under the healthiest average among troops in the United Kingdom.

Lucea.—The town of Lucea lies at the extremity of a spacious bay, encircled by high mountains. The ground in the vicinity presents a hilly and undulating appearance, is in a high state of cultivation, and there are no jungles or marshes in the neighbourhood. The climate is cool and pleasant as compared with most of the other stations, and there is always a refreshing sea breeze.

This station has generally been esteemed healthy; the mortality has averaged about 85 per thousand annually during the last 20 years: fever is not so common here as at most of the other stations, and the epidemics of 1819, 1822, and 1827, which caused so much mortality in other parts of the island, were not experienced here; but what is rather singular, an epidemic fever, which cut off about a third of the force, prevailed here in 1830, when the rest of the island was exempt from it.

This completes all the notice of these stations which these limits will admit. There are various other out-posts which have occasionally been occupied by our troops during the three years preceding 1837. Some of them are so unhealthy that nearly half the force has been cut off in the course of a few months; while others are almost as healthy as Maroon Town. Those who wish for further information in regard to the nature of the locality, or the fate of the detachments sent there, must refer to the Report itself.

In regard to the extent of sickness which has prevailed among the troops in this island during the same period, every disease which has come under treatment during the last 20 years has been carefully noted, and the totals as well as ratio per thousand of the strength admitted annually are nearly as follows:—

	Admissions.		Deaths.	
	Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.	Total among whole Force in 20 Years.	Annual Ratio per 1000 of Mean Strength.
Fevers	46,922	910	5,253	101·9
Eruptive Fevers	10	·2	..	..
Diseases of the Lungs	4,357	84·8	388	7·5
„ of the Liver	539	10	51	1·
„ of the Stomach and Bowels	12,282	238	260	5·1
„ of the Brain	720	14	137	2·6
Dropsies	258	5	61	1·2
Rheumatic Affections	1,479	29	5	
Venereal „	1,021	20	1	
Abscesses and Ulcers	9,667	187	18	
Wounds and Injuries	6,164	120	21	
Punished	3,285	64	..	2·
Diseases of the Eyes	4,644	90	..	
„ of the Skin	337	6	..	
All other Diseases	1,760	34	69	
Total	98,455	1,812	6,254	121·3

The only facts we have at present leisure to notice in this table, is, that though diseases of the lungs are not so productive of mortality as in the Windward and Leeward Command, they are more so than in Great Britain. The following are the diseases of which this class is composed:—

	Admitted.	Died.	Proportion of Deaths to Admissions.
Inflammation of the Lungs . .	697	15	1 in 46
Pleurisy	29	0	0 in 29
Spitting of Blood	103	12	1 in 9
Consumption	661	315	1 in 2
Acute Catarrh	2,438	18	1 in 135
Chronic Catarrh	371	23	1 in 16
Asthma	41	3	1 in 14
Difficulty of Breathing . . .	12	2	1 in 6
Total	4,357	388	1 in 11
Annual Ratio per 1000 of Mean Strength	85	7.5	..

As an instance how much more prevalent consumption is in this country than in Great Britain, it may be stated that out of an aggregate strength of 51,567 serving in Jamaica, 661 have been treated for that disease, being 13 per thousand annually, while, of 44,611 Dragoon Guards and Dragoons in the United Kingdom, only 286 have been treated, or between 5 and 6 per thousand annually. This is the more remarkable, as catarrhal affections and inflammations of the lungs are much less common than in this country.

There is the same remarkable exemption from venereal disease in Jamaica as in the Windward and Leeward Command; in fact this feature extends throughout the whole of the West India Colonies. The following will serve as a comparison of the relative influence of that and some of the minor diseases among troops in the West Indies and Great Britain:—

	Admissions per 1000 of the Force, Annually,		
	In Jamaica.	In Windward and Leeward Command.	In Great Britain.
From Rhenmatic Affections . .	29	49	50
Venereal Affections	20	35	181
Ulcers and Abscesses	187	204	133
Wounds and Injuries	120	129	126
Diseases of the Eyes	90	89	19
Skin	6	6	29
Punished	64	50	8

III.—THE BAHAMAS AND HONDURAS COMMANDS.

We shall next notice very briefly the influence of the two other Commands—the Bahamas and Honduras—on the health of the white troops.

The force there is very limited, and therefore it is impossible to draw deductions with equal accuracy; but the following table has been prepared to exhibit the principal results so far as regards that class of troops:—

	Bahamas.—Average Strength 27.		Honduras.—Average Strength 21.	
	Total Admissions in 20 Years.	Total Deaths in 20 Years.	Total Admissions in 15 Years.	Total Deaths in 15 Years.
By Fevers	506	85	221	27
Eruptive Fevers . . . .	..	..	13	1
Diseases of Lungs	15	3	2	..
,, Liver	5	1	38	..
,, Stomach and Bowels }	82	7	2	..
,, Brain	9	3	5	1
Dropsies	7	3	4	1
Rheumatic Affections . .	7	..	13	..
Venereal ditto	23	..	8	..
Abscesses and Ulcers . .	31	..	20	..
Wounds and Injuries . .	33	..	37	..
Punished	26	..	12	..
Diseases of the Eyes . .	4	..	3	..
,, Skin	4	..	1	..
All other Diseases . . .	13	..	8	..
Causes not known, the Deaths being omitted in Medical Reports. . }	..	5	..	3
Total	765	107	387	33

Of these two Commands the Bahamas are the most unhealthy. The force of white troops stationed there has been very small, and has varied materially in different years; but in all there have been 107 deaths recorded in 20 years, out of an average force of 27; being about a fifth part of the force annually. Most of this mortality took place in 1819 and 1823, on both of which occasions nearly half the force was cut off.

The island of New Providence, in which the troops are principally quartered, is 21 miles in length from east to west, and 7 in breadth from north to south. It is nearly covered with large trees and brushwood, and much intersected with marshes and lagoons. A range of slightly elevated hills runs along part of the island at a very short distance from the sea; and upon the face of this ridge stands the town of Nassau, the capital of the island and seat of government. Another range runs nearly parallel to the former, at the distance of about two miles and a half: the whole of the intervening space forms an extensive marsh.

The climate of the Bahamas varies very considerably both in temperature and salubrity, according to the geographical position and local peculiarities of each island. At New Providence the weather, during the cold season, which extends from November to May, is extremely pleasant; the thermometer in the shade being generally from 60° to 70°, the mid-day heat tempered by a constant breeze, and the evenings cool and agreeable.

The losses of the troops here would lead to the conclusion that the climate is exceedingly inimical to the health of Europeans; the mortality however seems rather to have arisen from the unhealthy site of Fort Charlotte, where the troops were posted. Shortly after it was erected, at the close of the last century, nearly the whole of the 47th regiment, including men, women, and children, were swept off by yellow fever within a few weeks. In 1802 the 7th Fusiliers buried 220, out of 300, within as short a period; and, such was the virulence of the disease, that, out of 12 officers attacked, one only recovered. In the following year it again broke out, and reduced the remainder of this force to 50 men, whose lives were, for a time, saved by removal to a neighbouring island, where only one died in the course of three months; but, immediately on their return, the commanding officer and almost every man of this ill-fated body fell victims to the insalubrity of the fort. For some years afterwards no European troops seem to have inhabited it; but 70 men of the 58th regiment were sent there in 1818, who lost about 40 in six months, besides 13 out of 37 women and children: not a man of the whole force was left fit for duty, and the lives of the survivors were only saved by their removal to a small island about a mile and a half distant.

These barracks have now been abandoned, and the mortality is much lower, though the number of white troops is so small, that no exact estimate can be formed of the influence of the climate from such limited data.

The Honduras Command is not so unhealthy. The average force there has been 21, and the deaths during the last 15 years 33, being at the rate of about 10 per cent. annually; the numbers however are rather too few to warrant any positive conclusion. The features of this settlement are somewhat similar to Demerara and Berbice. The troops are principally quartered near the town of Belize, the capital of the settlement, which is built on the banks of a river of that name. The ground on which it stands is very low, and principally composed of ballast deposited by the shipping. During the rains, it is so flooded in many parts that, from the want of drainage, pools of stagnant water are formed, which remain during the greater part of the wet season. To the north of the town is a very extensive morass, from two to three miles in circumference. Indeed, the whole neighbourhood, to a considerable distance, is interspersed with swamps and marshes, which, during the wet season, are covered with water.

The seasons here are much the same as in Jamaica; but the climate is more moist and variable. The heat is generally tempered by the sea-breeze from the east and its collateral points; but, during their absence, or the prevalence of westerly winds, it is very sultry and oppressive. Changes of temperature are very sudden, the thermometer often rising 14° or 15° between the morning and noon.

This is the only station in the West Indies in which the cholera, in its epidemic form, has appeared; but it did not prove fatal to any of the white troops. Its effect upon the blacks will hereafter be noticed.

(To be concluded in a future Number.)

Abstract of Criminal Tables for England and Wales, 1837; with Remarks thereupon, chiefly by the Compiler, S. REDGRAVE, Esq., F.S.S., of the Home Office.

THE Tables showing the number of Criminal Offenders Committed for Trial or Bailed for Appearance at the Assizes and Sessions held in England and Wales in the year 1837, have been made out in the same form as those for the three preceding years, except that the alterations in the Criminal Law, made by the Acts of the last Session, have rendered it necessary to introduce two additional columns, in order to show the new periods of transportation established by those Acts; and that the numbers charged with offences committed within the jurisdiction of the City of Bristol, and heretofore shown in two separate Tables, have been classed with those committed in the County of Gloucester. This last alteration has been made necessary, in consequence of the Municipal Act, by the operation of which all persons charged with Capital Felonies committed within the City jurisdiction, are sent to the Gloucestershire Assizes for trial; and separate Tables for the City would not, if continued, show the whole number of offenders committed for offences perpetrated within its jurisdiction.

The Tables exhibit a considerable increase in the number of offenders brought before the criminal courts in the past year; but it would be incorrect to assume that this increase is a proof of an increase of crime to the same extent. The increase in the number may perhaps in a great degree be attributed to the increased proportion of apprehensions consequent upon the extensive establishment of an efficient Police in the municipal boroughs, and to the greater facilities in criminal proceedings afforded by the extended grants of local sessions. Comparing the total numbers in England and Wales in the years 1836 and 1837, the increase in the latter year amounts to 2628 persons, or nearly 12·5 per cent.*; and comparing the number in 1837 with the average of the three preceding years, the increase in 1837 is 2224 persons, or 10·4 per cent. If these general results are examined in detail, it will be found that an increase has taken place in thirty-three English counties, and in both North and South Wales. In eight counties it has exceeded 30 per cent., in nine counties it has been between 20 and 30 per cent., and in ten counties it has been between 10 and 20 per cent. These counties are—

	Per Cent.		Per Cent.
Northampton	59	Durham	23
Stafford	43	Essex	21
Cornwall	42	Hereford	21
Leicester	39	Derby	18
Wilts	36	Southampton	12
Bucks	34	Rutland	12
Dorset	33	Chester	11
Berks	32	Northumberland	11
Somerset	29	Oxford	11
Monmouth	28	Salop	11
Devon	27	Sussex	10
Worcester	25	York	10
Westmoreland	25	Gloucester	10
Lancaster	24		

* In 1836 the number was 20,984, and in 1837, 23,612.—Ed.

Of the remaining six counties, the increase in Cumberland is 8 per cent., in Warwick 7 per cent., and in Hertford, Kent, Nottingham, and Lincoln, not exceeding 3 per cent. In North and South Wales the increase is respectively 3 and 2 per cent.

In seven counties there has been a *decrease*: in Middlesex of 2 per cent., in Surrey of 3 per cent., and in five contiguous counties of the Norfolk circuit, viz.—in Bedford of 24 per cent., Norfolk 11 per cent., Cambridge and Suffolk 7 per cent., and Huntingdon barely 1 per cent. Of the forty English counties, there has been a continuous *decrease* during each of the three last years in Middlesex and Surrey only; and during the same period, a progressive increase in Essex, Somerset, and Cumberland only.

It is gratifying to observe that the increase of the last year will, on analysis, be found to have been chiefly confined to offences of the least atrocious character. On the *First Class*—the Offences against the Person—there has been a decrease of 12 per cent.; in Murder, Attempts to Murder, and Manslaughter, the decrease is 7 per cent. as compared with the preceding year, and 14 per cent. as compared with the average of the three preceding years; in the Unnatural Offences there has been a great decrease, so also in Assaults on Peace Officers, and Common Assaults. But in Rape and Attempts to Ravish there is an increase of 8 per cent. In the *Second Class*—the Violent Offences against Property—the increase of the last year is 6 per cent.; but, if compared with the average of the three preceding years, it is reduced to 2 per cent. The principal increase in the second class has been in Burglary, and in House, Shop and Warehouse breaking; in Sacrilege and Robbery there has been a decrease. The gradual but certain proportional decrease, during the last four years, which the total numbers charged with Violent Offences against the Person and against Property included in the above two classes, have borne to the total of offences, is worthy of observation. This proportion was—

	Per Cent.
In 1834	17·44
1835	16·25
1836	15·50
1837	13·21

It is in the *Third Class*, containing the great bulk of offences committed by simple theft or fraud, that the increase has principally occurred, having amounted to nearly 17 per cent. In Sheep-stealing there has been a considerable increase in each of the last two years, and in Larceny by Servants in each of the last four years. In Simple Larceny alone the increase exceeds 18 per cent. In Malicious Offences against Property there has been a decrease which has reached 32 per cent., and has extended, with one exception, to every offence included in this class. In Forgery and Offences against the Currency, there has been an increase of 27 per cent. In the *Sixth*—the Miscellaneous Class—there is a trifling increase, though there has been a marked decrease during the last three years in the Offences against the Game Laws, which are included in it.

In looking at the increase generally, it may be observed, in reference to what has been mentioned as to the effect of the new Municipal Police in producing it, that Assaults, both Common Assaults and those on

Peace Officers, Robbery, and Attempts to Rob, Larceny from the Person (picking pockets), Riots, Breaches of the Peace, &c., which from their nature are immediately open to the observation and prevention of a police, have *decreased*; while on the contrary, those offences, not so immediately within the view of a police, whose action tends rather to their detection and prosecution than to their prevention, have increased,—such as Larceny in Dwelling Houses, Thefts by Servants, Embezzlement, Receiving Stolen Goods, Frauds, Uttering Counterfeit Coin, and Keeping Disorderly Houses.*

The following is a comparative view of the Sentences passed during the last two years:—

	1836	1 7
Death	494	438
Transportation for life	770	636
„ 15 years . . . . .	..	66
„ 14 years	585	479
„ 10 years . . . . .	..	179
„ 7 years	2,249	2,413
„ Other periods	7	12
Imprisonment for 3 years, and above 2 years	1	14
„ 2 years, and above 1 year	285	394
„ 1 year, and above 6 months	1,455	1,628
„ 6 months and under	8,384	10,258
Whipped, Fined, and Discharged	535	562

The sentences classed in the Tables under the head “Imprisoned 6 months and under,” comprise so large a proportion of the punishments, that in order to show them with greater exactness the numbers have been calculated which fall under these more minute periods, viz:—

Imprisoned 6 months, and above 5 months	2261
„ 5 months „ 4 months	51
„ 4 months „ 3 months	748
„ 3 months „ 2 months	2461
„ 2 months „ 1 month	1731
„ 1 month, and above 2 weeks	1890
„ 2 weeks „ 1 week	597
„ 1 week „ 3 days	376
„ 3 days and under	143

This calculation strongly exhibits the leniency with which the law is administered. Of the whole number convicted, 42 per cent. were sentenced to periods of imprisonment not exceeding three months; and the proportion sentenced to periods not exceeding 6 months reaches 60 per cent.

The number of Executions during the past year is far below that of any previous year on record. Eight persons only were executed, all of whom were convicted of murders of an atrocious character; two for one offence in Norfolk, and one in each of the counties of Middlesex, Surrey, Bucks, Gloucester, Worcester, and York.

The total number acquitted was 6496; viz.,—on Trial, 4388; no Bills being found, 1637; not Prosecuted, 471. This gives the propor-

* The increase in the number of prosecutions against Disorderly Houses, which is principally confined to the counties of Middlesex and Surrey, evinces an increased vigilance on the part of the parochial authorities in the Metropolis to abate this fruitful source of vice.—*Ed.*

tion of Acquittals to Convictions, 1 in 8·6. The proportion acquitted in the different classes of offences, was—

1st class, Offences against the Person	1 in 2·6
2d „ „ „ Property, committed with violence	1 in 3·7
3d „ „ „ „ „ without violence	1 in 3·8
4th „ „ Malicious Offences against Property	1 in 1·5
5th „ „ Forgery and Offences against the Currency	1 in 4·7
6th „ „ Other Offences, not included in the above classes.	1 in 2·7

This variation in the proportion is a result which might be anticipated from the different nature of the offences of which the classes are comprised. In the Offences against Property, in the 2d and 3d classes, the property stolen affords not only the clue to detection, but its possession is one of the strongest proofs of guilt; a proof which does not exist in the Offences against the Person in the 1st class, nor in the Malicious Offences of the 4th class. The large proportion of convictions in the 5th class may be attributed to the prosecution of Offences against the Currency by the officers of the Mint. In Uttering counterfeit Coin, the proportion acquitted is only 1 in 5·6. At the same time it will be found, that the acquittals bear some proportion to the penalty attached to the offence; and that where the most severe penalties are incurred, a stronger proof is necessary to insure conviction than in the lighter offences. Taking some of the offences separately—in Arson and Attempts to Burn Dwellings, &c. (offences, however, of extremely difficult proof,) the acquittals are 1 in 1·2; in Murder and Attempts to Murder, 1 in 1·5; in Rape, and Assaults with intent to Ravish, 1 in 1·7; in Forgery, 1 in 2·5; and in Robbery, 1 in 2·2; though in Burglary and House-breaking the acquittals are only 1 in 4·5—a very high proportion, and greater than in Simple Larceny, in which offence they are 1 in 4·2.

The proportion acquitted in each of the last four years, was—

In 1834.	1 in 3·5
1835.	1 in 3·5
1836.	1 in 3·4
1837.	1 in 3·6

which would seem to show an increased certainty of procedure in the last year, and that the recent alteration in the law, allowing Prisoners the assistance of Counsel, has not caused an increase in the number of Acquittals.

On a comparison of the Returns from the several Counties a great disproportion is exhibited in the Acquittals. The general average, as before stated, is 1 in 3·6. This average has been exceeded in sixteen counties, the most prominent of which are—

Warwick	1 in 4·8	Leicester	1 in 4·1
Lancaster	1 in 4·5	Wilts	1 in 4·0
Nottingham	1 in 4·4	Bedford	1 in 4·0
Chester	1 in 4·4	Middlesex	1 in 3·9
Gloucester	1 in 4·1		

The ten counties in which the proportion Acquitted was the greatest, are—

Hereford	1 in 2·2	Surrey	1 in 3·1
Monmouth	1 in 2·3	Suffolk	1 in 3·1
Cumberland	1 in 2·7	Oxford	1 in 3·1
Stafford	1 in 2·9	Cambridge	1 in 3·1
Northumberland	1 in 3·0	Devon	1 in 3·1

Imprisonment for 3 years, and above 2 years . .	1
„ 2 „ 1 year . .	3
„ 1 „ 6 months . .	8
„ 6 months & above 5 „ . .	17
„ 4 „ 3 „ . .	3
„ 3 „ 2 „ . .	32
„ 2 „ 1 „ . .	33
„ 1 „ 14 days . .	58
„ 14 days and above 7 „ . .	27
„ 7 „ 3 „ . .	35
„ 3 days and under	14
Whipped	9
Fined	3
Total Acquired, viz. :—	
Not Guilty	39
No Bill	26
No Prosecution	12
Total	77

In addition to the above terms of Imprisonment, of those aged 12 years, 32 were sentenced to be Whipped once, and 12 twice; of those aged 11 years, 15 once, 2 twice, and 1 thrice; of those aged 10 years, 12 once and 1 twice; of those aged 9 years, 5 once and 1 twice; and 1 aged 8 years, once.

The girl of 7 years old was sentenced to the shortest period of imprisonment; 2 children of 9 years old, and 1 of 11 years were sentenced to 10 years' transportation; 1 of 8 years, 2 of 9, 8 of 10, 4 of 11, and 19 of 12 years old, were sentenced to 7 years' transportation. The remainder under 10 years old were sentenced to not more than 2 months' imprisonment. One child of 12 was capitally convicted for robbery, but the sentence was commuted to one month's imprisonment.

Table showing the Result of the Proceedings against the Offenders, aged 12 years and under, with reference to their Offences.

OFFENCES.	Total Prosecuted.	Total Convicted.
Manlaughter	1	..
Assault	1	1
Burglary	1	..
House-breaking	5	4
Curtilage-breaking	3	3
Robbery.	2	1
Horse Stealing.	3	2
Larceny, to the value of 5 <i>l</i> . in a Dwelling } House }	2	1
Larceny, from the Person	20	19
Larceny, by Servants	13	10
Larceny, simple	276	223
Stealing Fixtures	10	7
Embezzlement.	2	1
Receiving Stolen Goods	7	2
Frauds and Attempts to Defraud	7	5
Arson (Capital)	1	..
Uttering Counterfeit Coin	2	1
Riot.	1	1
Misdemeanor—(Administering Poison to } Heras and Annoy) }	1	..
Total.	358	281

It is remarkable, that the proportion Acquitted in the above Tables is only 1 in 4·6; the general proportion being 1 in 3·6.

Of 301 persons (out of the above total of 358), the periods of imprisonment before Trial appear from the Returns; they are found to average 26 days. Of 205, who upon conviction were sentenced to terms of imprisonment, 77 had undergone, before Trial, a longer imprisonment than that to which they were afterwards sentenced by the Court.

The degree of Instruction has been ascertained during the past year, under the same definitions as in the year preceding. The proportions, at these periods, are as under:—

	1836	1837	
	Proportion.	Number.	Proportion.
Unable to read and write	33·52	8,464	35·85
Able to read and write imperfectly.	52·33	12,298	52·08
Able to read and write well.	10·56	2,234	9·46
Instruction superior to reading and writing well	0·91	101	0·43
Instruction could not be ascertained.	2·68	515	2·18

Of the 358 offenders aged 12 years and under, 50 per cent. were uneducated; 48 per cent. were able to read and write imperfectly; and little more than 1 per cent. to read and write well.

The extensive changes in the Criminal Law by the Acts of the 1st Victoriæ could not be shown in the Tables for 1837, the Acts not having come into operation till late in the year; but the Tables for 1838 will be so drawn up, and such new definitions of offences introduced, as will be required to show the operation of these Acts, and the effect they have had upon Criminal Proceedings.

S. REDGRAVE.

A Table showing the Total Number of Persons Committed for Trial or Bailed in England and Wales, distinguishing the Nature of the Offences, in the Year 1837.

No. 1.—Offences against the Person.	Total Number of Offenders Prosecuted.	Total Convicted.
Murder	43	11
Shooting at, Stabbing, Administering Poison, &c., with intent to murder, maim, &c.	121	41
Manslaughter	199	89
Attempts to procure the Miscarriage of Women quick with Child	2	..
Ditto of Women not quick with Child	2	1
Concealing the Birth of Infants	41	22
Sodomy	22	9
Sodomy, Assaults with intent to commit, and other unnatural Misdemeanors	53	19
Rape, and carnally abusing Girls under the Age of Ten Years	73	..
Assaults with intent to ravish and carnally abuse	122	74
Carnally abusing Girls between the Age of Ten and Twelve Years	5	3
Abduction . . . . .	..	..
Bigamy	49	37
Child Stealing	3	3
Assaults	590	408
Assaults on Peace Officers in the Execution of their Duty	394	323
Total of No. 1.	1,719	1,046

No. 2.—Offences against Property, committed with Violence.

	Total Number of Offenders Prosecuted.	Total Convicted.
Sacrilege	4	1
Burglary	321	282
Housebreaking	495	403
Breaking, within the Curtilage of Dwelling Houses, and Stealing	93	80
Breaking into Shops, Warehouses, and Counting Houses, and Stealing	129	108
Misdemeanors, with intent to commit the above Offences	13	12
Robbery	290	158
Assaults, with intent to rob, and demanding Pro- perty with Menaces	44	26
Stealing in Dwelling Houses, Persons therein being put in fear	1	..
Sending menacing Letters to extort Money	1	1
Piracy . . . . .	..	..
Total of No. 1.	1,400	1,021

No. 3.—Offences against Property, committed without Violence.

Cattle Stealing	40	39
Horse Stealing	142	117
Sheep Stealing	371	249
Larceny, to the Value of £5, in Dwelling Houses	211	159
Larceny, from the Person	1,483	965
Larceny, by Servants	1,068	846
Larceny, simple	13,712	10,409
Stealing from Vessels in Port, on a River, &c.	83	60
Stealing Goods in Process of Manufacture	1	1
Stealing Fixtures, Trees, and Shrubs, growing, &c.	274	233
Misdemeanors, with intent to steal	17	12
Embezzlement	311	214
Stealing and receiving Letters Stolen from the Post Office, by Servants	5	4
Receiving Stolen Goods	707	331
Frauds and Attempts to defraud	469	348
Total of No. 3.	18,884	13,970

No. 4.—Malicious Offences against Property.

Arson (Capital)	40	8
Setting Fire to Crops, Plantations, Heath, &c.	2	..
Attempts to commit Arson, set fire to Crops, &c.	1	1
Riot, and feloniously demolishing Buildings, Ma- chinery, &c. . . . .	..	..
Destroying Silk, Woollen, Linen, or Cotton Goods, in Process of Manufacture	2	1
Destroying Threshing Machines	1	..
Destroying Hop-binds, Trees, and Shrubs, grow- ing, &c.	10	4
Killing and maiming Cattle	42	22
Sending Letters threatening to burn Houses, &c.	3	2
Other Malicious Offences	13	..
Total of No. 4.	14	38

No. 5.— <i>Forgery, and Offences against the Currency.</i>	Total Number of Offenders Prosecuted.	Total Convicted.
Forging and uttering forged Wills, and Powers of Attorney for the Transfer of Stock or Receipt of Dividends	1	1
Forging and uttering forged Bank of England Notes	4	2
Forging and uttering other forged Instruments . .	65	39
Having in Possession, &c. forged Bank of Eng- land Notes	1	1
Counterfeiting the current Gold and Silver Coin .	8	4
Having in Possession, &c. Implements for Coining	22	19
Buying and putting off counterfeit Gold and Silver Coin	1	1
Uttering and having in Possession Ditto	354	291
Counterfeiting, buying, putting off, and uttering counterfeit Copper Coin . . . . .	..	..
Total of No. 5.	<u>456</u>	<u>358</u>
No. 6.— <i>Other Offences, not included in the above Classes.</i>		
Assembling armed, &c. to aid Smugglers . . . .	..	..
Assaulting and obstructing Officers employed to prevent Smuggling	5	5
Deer Stealing, and feloniously resisting Deer- keepers	4	4
Being out armed, &c. to take Game by Night, taking Game by Night, and assaulting Game- keepers	143	110
Taking and destroying Fish in enclosed Water .	19	11
Being at large under Sentence of Transportation	1	1
Prison-breaking, harbouring and aiding the Escape of Felons	15	6
Perjury and Subornation of Perjury	33	7
Administering Unlawful Oaths . . . . .	..	..
Conspiracy to raise the Rate of Wages . . . .	..	..
Riot, Breach of the Peace, and Pound-breach .	523	363
Rescue, and refusing to aid Peace Officers . .	21	11
Keeping Disorderly Houses	180	92
Indecently exposing the Person	14	..
Felonies, not included in the above Denominations	11	4
Misdemeanors, Ditto	70	33
Total of No. 6.	<u>1,039</u>	<u>657</u>
Grand Total	<u>23,612</u>	<u>17,000</u>

The second column in the following table has been added by the Editor in order to show the comparative state of each county, as regards offences brought before the criminal courts. If the elementary facts were complete, the statement would be of the highest value, as it would exhibit the relative amount of crime in each county, and might thus lead to the detection of the causes which influenced its commission, but it possesses the following unavoidable defects. First, it exhibits only the number of offenders brought before the criminal courts, exclusive of the large number summarily convicted or discharged by magistrates, of which no complete return can be given. The number of persons summarily convicted in England and Wales, during 1837, was no less than 59,374; and the number discharged in London alone was 33,043. Secondly, it

shows the number of persons apprehended, but not the number of offences for which those persons were apprehended, nor the number of offences committed, the perpetrators of which were not apprehended. Hence, in the first case, neither the total number of offences can be shown, because the larger part are not included, nor the proportion of one county to another, because the practice of magistrates with regard to sending cases to the criminal courts differs materially in several counties; neither can the progress of crime be correctly estimated, because a change in the law may alter the jurisdiction of the criminal courts, and thus exclude or include a large class of offences; while in the second case the efficiency of the police, and other circumstances, will greatly affect the returns. Lastly, the calculations are necessarily framed upon the census of 1831, since which time the population has increased, and may also have fluctuated, considerably.

A Table showing the Total Number of Persons committed to Trial or Bailed in each County of England and Wales during the Year 1837, with the proportion of Offenders to the Population, according to the Census in 1831.

COUNTIES.	Criminal Offenders in 1837.	Proportion of Criminal Offenders to Population.	COUNTIES.	Criminal Offenders in 1837.	Proportion of Criminal Offenders to Population.
		One in			One in
Bedford . . .	123	776	Somerset . . .	1028	393
Berks . . .	270	538	Stafford . . .	909	451
Bucks . . .	258	568	Suffolk . . .	493	601
Cambridge . . .	260	550	Surrey . . .	950	512
Chester . . .	616	542	Sussex . . .	420	618
Cornwall . . .	281	1071	Warwick . . .	880	382
Cumberland . . .	154	1101	Westmoreland . . .	25	2201
Derby . . .	228	1040	Wilts . . .	482	498
Devon . . .	671	736	Worcester . . .	409	516
Dorset . . .	256	622	York . . .	1376	970
Durham . . .	202	1257			
Essex . . .	747	425	Total England .	23,134	565
Gloucester . . .	906	427			
Hants . . .	622	505	Anglesea . . .	16	3020
Hereford . . .	186	597	Brecon . . .	29	1647
Hertford . . .	335	428	Cardigan . . .	13	4983
Huntingdon . . .	67	794	Carmarthen . . .	49	2054
Kent . . .	896	534	Carnarvon . . .	22	2988
Lancaster . . .	2809	475	Denbigh . . .	76	1094
Leicester . . .	432	456	Flint . . .	39	1538
Lincoln . . .	412	770	Glamorgan . . .	103	1229
Middlesex . . .	3273	415	Merioneth . . .	5	7121
Monmouth . . .	154	637	Montgomery . . .	54	1231
Norfolk . . .	659	591	Pembroke . . .	54	1507
Northampton . . .	298	601	Radnor . . .	18	1369
Northumberland . . .	189	1179			
Nottingham . . .	307	734	Total Wales .	478	1684
Oxford . . .	272	559			
Rutland . . .	27	718	Total England and Wales .	23,612	588
Shropshire . . .	252	884			

This statement, however, is still of considerable value, as serving to show the amount of detected crime in one county, as compared with another, at different periods. In the fourth part of the Government

Statistical Tables (at page 422), an account is given of the proportion of persons charged in each county with criminal offences, on the average of the three years ending with 1832, to the population of 1831; it will be interesting to compare the ten counties in England in which the proportion of offences was greatest, and the ten in which it was smallest at that period, with the corresponding counties at the present.

Ten counties in the order in which the proportion of offences to the population was greatest—

1830-32.	1837.
1. Middlesex.	Warwick.
2. Gloucester.	Somerset.
3. Warwick.	Middlesex.
4. Essex.	Essex.
5. Wilts.	Gloucester.
6. Hertford.	Hertford.
7. Lancaster.	Leicester.
8. Surrey.	Stafford.
9. Somerset.	Lancaster.
10. Chester.	Wilts.

Ten counties in the order in which the proportion of offences to the population was smallest—

1830-32.	1837.
1. Westmoreland.	Westmoreland.
2. Northumberland.	Durham.
3. Cumberland.	Northumberland.
4. Durham.	Cumberland.
5. Cornwall.	Cornwall.
6. Rutland.	Derby.
7. Derby.	York.
8. Lincoln.	Shropshire.
9. Dorset.	Huntingdon.
10. Northampton.	Bedford.

These statements exhibit so much uniformity at the two periods as to leave no reason to doubt their general correctness.

The first shows an improvement in the counties of Middlesex, Surrey, Gloucester, Wilts, and Lancaster. Middlesex, which was first on the list, is now third; Surrey, which was eighth, has disappeared altogether from the list; Gloucester, which was second, is become the fifth; Wilts has fallen from the fifth to the tenth place, and Lancaster from the seventh to the ninth. This, as regards the two former counties, is corroborated by the fact previously noticed by Mr. Redgrave, that there has been a continuous decrease of committals during each of the three last years in those counties. On the other hand, Warwick, which was only third on the list, has become first, and Somerset, which was ninth, is become second, while Leicester and Stafford have advanced into the list. With reference to Somerset, in which the increase is so remarkable, Mr. Redgrave states that it is one of the counties in which the increase of committals has been continuous during the last three years.

It appears from the second statement, that at both periods the four northernmost counties of England and Cornwall have continued, in nearly the same order, the most free from Committals; and it is worthy of notice, that these, with Derby, which stands next on the list in 1837, include all the principal mining counties in England.

It will be observed that the proportion of committals to the population in Wales is much smaller than in England. Only four English counties are superior to the worst Welsh county, which is considerably below the county standing next to it in order of inferiority. For the reasons already given, caution must be used in drawing too positive inferences from these statements as regards the comparative amount of crime in different parts of the country. The Statistics of Crime in the United Kingdom are very imperfect, and abound in sources of fallacy; some of the principal circumstances affecting the number of offences have already been noticed, but the Government Tables are still more deficient with respect to the exhibition of the causes of crime, and the character and condition of the criminals. Without a knowledge of these particulars it is hopeless either to detect the means of preventing crime, or to adopt any effectual measures for its repression.

In connexion with the subject of juvenile offenders to which Mr. Redgrave has adverted in the preceding remarks, the following tables, abstracted from a paper which has been since laid before the House of Lords, will not be uninteresting. It contains a statement of the number of children under the age of 16 who have been committed to the Penitentiary at Millbank within the last seven years, from which it appears that 219 children, of whom one-third are females, have been sentenced to terms of imprisonment varying from one to ten years, but of the whole number only 20 were sentenced to less than three years confinement. It will probably excite some astonishment that one child of eight years old, two of nine, and eight of ten, should be imprisoned, even under commuted sentences, for three years; and still more, that a child of ten years old, should, in the same manner, be committed for ten years. It is true that some of these children may have been committed, either to remove them from the evil influence of vicious parents, or as incorrigible offenders, but in either case it may fairly be doubted whether they did not stand more in need of the discipline and instruction of a school than the punishment of a prison. The Government has taken this view of the subject, for during the present session the Secretary of State for the Home Department has introduced a Bill for establishing a prison in which young offenders may be detained and corrected, and may receive such instruction and be subject to such discipline as shall appear most conducive to their reformation, and to the repression of crime. This Bill has already passed the House of Commons, and an abstract of it will be given at the end of this paper.

The first of the following Tables shows the ages and the terms of imprisonment of children under 16 confined in the Penitentiary.

The second Table exhibits the Courts in which the prisoners were tried.

The third distinguishes the nature of their offences. It will be seen that by far the greater number consist of acts of theft. Nineteen were cases of burglary and housebreaking, in which there can be little doubt that the offenders were the instruments, and oftentimes the scape-goat, of more aged and hardened criminals. In two cases only robbery was accompanied by personal violence, and only five are classed under the head of systematic fraud or embezzlement.

I.—Distinguishing the Ages and Terms of Imprisonment.

Ages.	Period under original Sentence. Number of Years.			Period of Commutation. Number of Years.					Total.		Total
	1	1½	2	3	4	5	7	10	Males.	Females	
MALES:											
8	..	..	..	1	..	..	..	..	1	..	1
9	..	..	..	2	..	..	..	..	2	..	2
10	..	..	..	5	..	..	..	1	6	5	11
11	..	..	1	5	..	3	..	1	10	5	15
12	..	1	1	10	..	4	..	..	16	10	26
13	2	..	1	13	..	8	..	1	25	10	35
14	5	1	1	17	1	7	1	2	35	19	54
16	2	..	1	33	3	11	..	2	52	23	75
Total	9	2	5	86	4	33	1	7	147	72	219
FEMALES:											
10	..	..	1	3	..	1	..	..	..	5	..
11	..	..	1	2	..	2	..	..	..	5	..
12	..	..	..	3	..	4	1	2	..	10	..
13	..	..	..	2	1	7	..	..	..	10	..
14	1	..	1	7	..	10	..	..	..	19	..
15	..	..	..	9	1	11	..	2	..	23	..
Total	1	..	3	26	2	35	1	4	..	72	..
Total Males and Females	10	2	8	112	6	68	2	11	..	..	219

Note.—The periods of Commutation here specified may be considered nominal, as Prisoners have been recommended for pardon, according to certain rules, long before the expiration of these periods. In general they have been reduced by such recommendations:—

If for 5 Years to 3 Years
 .. 7 3½ ..
 .. 10 4 ..

In cases of bad conduct Prisoners have been detained longer.

At present the periods are fixed as follows, under the Act 7 Will. IV. c. 12, and no recommendations for pardon are made by the Committee.

Transportation for 7 Years is commuted to 3 Years' Imprisonment.

.. 14 .. 4 ..
 .. Life .. 8 ..

II.—Distinguishing the Courts in which the Prisoners were Tried.

Court.	Original Sentence.			Commutation of Punishment.			Total.		
	Male.	Female.	Total	Male.	Female.	Total	Male.	Female.	Total
Central Criminal Court	5*	..	5	49	12	61	54	12	66
Old Bailey Sessions	..	..	..	12	18	30	12	18	30
Country	8	3	11†	45	28	73	53	31	84
Country Assizes	3*	1	4	25	10	35	28	11	39
Total	16	4	20	131	68	199	147	72	219

* In six of these cases transportation was to follow imprisonment.

† Seven of these cases came from the Stafford Sessions.

III.—*Distinguishing Nature of the Offences.*

Offences.	Ages of Males.								Ages of Females.								Total
	8	9	10	11	12	13	14	15	Total	10	11	12	13	14	15	Total	
Burglary and Housebreaking	1	..	7	6	5	19	..	..	..	1	..	..	1	20
Stealing Money, Plate, and Jewellery.	..	1	2	3	2	2	9	6	25	1	1	3	2	4	8	19	44
,, Apparel.	2	7	..	7	16	2	..	2	3	8	6	37
,, Goods.	3	..	3	..	6	8	20	2	1	3	1	1	3	31
,, Cattle.	1	..	..	4	5	..	..	..	..	..	..	5
,, Poultry.	1	..	1	..	1	1	4	..	..	..	..	..	..	..	4
,, From the Person.	..	1	1	..	..	4	2	4	12	..	..	..	1	2	1	4	16
Robbing a Boy.	2	2	..	..	..	..	..	..	..	2
Shoplifting.	2	..	..	1	3	..	1	1	..	1	1	4	7
Embezzlement.	2	3	5	..	..	..	..	..	..	5
Larceny.	1	..	2	2	5	5	7	10	32	..	1	1	2	3	4	11	43
Felony.	1	1	..	1	..	..	..	..	1	2
Receiving Stolen Property.	1	..	..	..	2	3	..	..	..	..	..	..	..	3
Total.	1	2	6	10	16	25	35	52	147	5	5	10	10	19	23	72	219

Abstract of Lords' Paper, Sess. 1837-8, No. 86.

The following are the principal provisions of a Bill, which is now before the House of Lords, for establishing a prison for young offenders, with a description of the buildings at Parkhurst, in the Isle of Wight, which it is proposed to apply to this purpose. These buildings, which were lately used as a military hospital, and as a medical asylum for the children of soldiers, are now nearly ready for the reception of prisoners. They are adapted to the confinement of 320 boys, viz.—200 boys of 12 years old and upwards, and of 120 boys under that age, and occupy an area of about 4 acres. There are 80 acres of land attached, in the cultivation of which the boys can be employed; and there are, besides, facilities for employing the boys as tailors, shoemakers, ropemakers, bookbinders, and carpenters.

The nature of the discipline, according to the Report of the Inspectors of Prisons, will consist in a vigilant system of personal superintendence, instruction in moral and religious duties, and industrious occupations of various descriptions. As it is intended to encourage the boys to emigrate to a distant colony at the expiration of their imprisonment, they will be especially instructed in those branches of industry which are most likely to render them useful as agricultural servants. While the prominent features of the establishment will be of a penal character, the utmost attention will be directed to the health, moral welfare, and suitable comfort of the boys. It will be, in the best meaning, but in no injurious sense of the word, a prison, while the discipline will be so peculiarly adapted as to combine cheerful exercises and youthful recreation with the salutary restraints of penal correction.

The Parkhurst "Reformatory" admits of being considerably enlarged; but to whatever extent further accommodation may be practicable, it is obvious that this prison can never provide for the number of boys committed to the prisons throughout the country, nor even in the metropolis, nor that its establishment will supersede the necessity of further measures being taken to arrest the progress of juvenile delinquency.

It appears that the number of boys under 12 years of age committed to trial or summarily convicted in England and Wales during the year 1837 was 1196; the number between 12 and 14, 2465; and between 14 and 17 years of age, 8332; in all 11,993.

The Parkhurst Reformatory, however, will serve as a model for juvenile prisons in other parts of the kingdom, and will lead, it is to be hoped, to the establishment of similar places of confinement wherever the number of offenders of this class is sufficiently large to render such a measure necessary. The following Paper, by Dr. Kay, contains an interesting account of a similar establishment in Holland.

The appointment of officers and the regulation and government of the prison at Parkhurst is placed by the Bill now before Parliament in the hands of the Secretary of State, who is empowered to remove thither any young offender, male or female, under sentence or order of transportation, or under sentence of imprisonment.

The expense of the removal is to be defrayed by the county or place for which the court in which the offender was convicted was held.

Offenders thus removed will remain in this prison until transported according to law, or entitled to their liberty, or until removed by order of the Secretary of State, to the prison or place whence they were brought. It is provided that in every case in which it shall not be made to appear to the satisfaction of the Secretary of State, that an offender, who has been confined in this prison under sentence of imprisonment, will go out of England upon being entitled to his liberty, the Secretary of State shall direct his removal to the local prison whence he was brought, so that the last two days of his imprisonment may be passed therein.

If offenders removed to this prison prove incorrigible the Secretary of State may give an order for their transportation or removal to another prison, according to their original sentence.

Notes illustrative of a previous Paper on the Training in Schools of Industry of Children dependent from Crime, Orphanage, &c. By JAMES PHILLIPS KAY, Esq., F.S.S. &c.

HAVING in the first number of the Journal described the industrial department of a school for the training of pauper children, I proceed to furnish some brief notice of a visit to two institutions for the training of children in Holland.

The methods of instruction and moral discipline, and the nature of religious instruction appropriate to schools for the training of pauper children, may be more fully discussed elsewhere. I shall, however, necessarily be led to some brief incidental notice of these subjects in the following pages.

The prison in which juvenile delinquents are confined at Rotterdam also contains adult criminals, but a complete separation is maintained between the children and adults. The institution has only recently been developed, and no separate building has yet been appropriated to the reception of the boys, whose redemption from criminal habits is the object of the moral discipline recently introduced within the walls of this prison. The boys confined here are condemned for periods varying from 6 months to 2, 3 or 6 years; and one boy in the prison had been

sentenced to 15 years' confinement. The prison is a substantial brick building; the rooms are everywhere lofty, well-ventilated, and clean. It contains 111 young prisoners under 18. The boys are divided into three classes; the first class is distinguished from the others by a black collar worn by each boy. This class contains 22 boys, all of whom, excepting two, had been in the school before; but from this fact it would not be right to draw an inference prejudicial to the efficiency of the discipline maintained in the school, because the institution has been established only two years, and its effects on this class of children cannot therefore at present be appreciated. The boys in this class have been a second time convicted of crime, or for the first time of crimes evincing a greater degree of turpitude; or they are boys whose conduct in the prison had merited degradation, and appeared to require severer discipline. They are not allowed recreation; in proceeding from the yard to the work-shop or school-room they follow each other in a line, and are forbidden to converse or communicate with each other during the day-time. At night they sleep in separate hammocks, and silence and order are strictly maintained in their dormitory by a sentinel placed in a situation enabling him to observe all that occurs in the apartment. The discipline of this class is in every respect more severe than that of the two other.

The second class consists of boys who have conducted themselves in the prison with greater propriety, or who were convicted of smaller offences. This class contains 40 boys, distinguished by a stripe of black cloth upon the collar. They are allowed to walk in pairs to and from work, exercise, and meals. No other recreation, except walking the yards, which are small, and inclosed by the building three or four stories high, is allowed. If the boys in this class conduct themselves well, they are promoted to the third class.

The third class consists of boys who have shown better dispositions in the school, or have been committed for the smallest offences. They are 49 in number. They are allowed two or more hours of unrestrained recreation in their yard, and the discipline affecting this class is in every respect more lenient than in the two former classes.

Each of the three classes has a separate day-room, sleeping-room, and yards, and they are not allowed to mingle, excepting when under the eye of the schoolmaster during the hours of instruction, and when all communion is precluded.

In the work-rooms the young prisoners are instructed in trades. On entering the prison, each boy is called upon to choose the trade which he prefers to acquire, and he is accordingly attached to the person entrusted with the instruction of the children in that department of industry, his attention being concentrated on the particular trade which he has selected. The materials for the work are chiefly sent into the prison by tradesmen in the town, and tariff prices are fixed for the regulation of the payments required in return for the labour. We were assured that the prices are so fixed as not to occasion an injurious interference with the ordinary manufacturer. One-half of the profits of the labour of the boys is retained by the Government to meet the expenses of the establishment, maintenance, and education of the prisoners; two-fifths of the remaining half are given to the prisoners in a coin used only

in the prison, and are expended by them in purchasing such things as soap, and other necessities, at a cantine established in the prison for that purpose; the remaining three-fifths of the half are retained as a fund, which accumulates until the young prisoner is fitted to be restored to the world, and which is intended to enable him to obtain a suitable outfit, or to be expended as a premium of apprenticeship, or in some similar manner to facilitate his settlement in an honest and industrious calling.

We found that 30 of the boys were in course of training as tailors, and 16 as shoemakers. Boys who are admitted for periods less than a year, are employed in making nets, the twine being sent into the prison to be manufactured; or in sorting wool, which is also sent thither for that purpose, the price of their labour being regulated by the tariff.

The cantine is conducted by a person appointed and paid by the Government. The profits arising, after the salary of the officer and all other outgoings are defrayed, is divided at certain periods among the young prisoners, as a reward for their good behaviour and attention to their duties.

The cantine must be the source of abuses. If luxuries are allowed to boys detained for crime, wholesome discipline may gradually be perniciously relaxed by a constant succession of slight concessions, to which form of degeneration the regulations of such establishments are peculiarly liable.

The children are said to be taught reading, writing, arithmetic, geography, history, the catechism, singing, both of national airs and school songs, and devotional hymns. Religious instruction is evidently an object of much solicitude, and the improvement of the morals was declared to be the main and ultimate object of the whole system of training and instruction.

The children are catechized every Thursday. The Protestants are then examined by a "Catechizer," who is of their faith. The Catholics are instructed by their Priests, who attend every week for that purpose, as do also the Presbyterian, Lutheran, and Reformed Dutch Protestant Ministers. On all occasions of catechization, the Protestant children are instructed separately from the rest of the school. We heard the children sing with perfect precision of time and tune, the national song, a hymn, and a solemn psalm tune. The decorum of their manners during this exercise, and also during a brief extempore address delivered by the schoolmaster, inspired us with a belief that the moral discipline of the school was in an efficient state.

The exercises in the yards consist chiefly of military movements, marching, countermarching, &c. in perfect silence. In writing, the boys appeared to have made great progress. We had no opportunity of witnessing the methods of instruction pursued, as the day of our visit was devoted to catechization.

When the boys have completed the period of their confinement, if they can produce satisfactory testimonials of their conduct while in the prison, they are not unfrequently assisted by the members of a benevolent society, who endeavour to procure situations for them in service, and sometimes pay the premiums which are required.

The natural economy of the prison for juvenile delinquents appeared

to comprise a more consistent system of constitutional and moral discipline than any establishment of the kind which I had previously visited. The defect appeared to be that no sufficient security was provided for the maintenance of the correctional discipline, and that its present state was unsatisfactory. It would seem expedient that the boys beyond a certain age, should sleep and work separately after the hours of school and recreation.

The Orphan Asylum of the City of Amsterdam may also afford a few points of illustration and warning.

Besides this house of refuge for orphans, each of the religious sects in Amsterdam has one at least equally extensive, if we may judge from the exterior of the Catholic Orphan House, which is even more extensive and more magnificent than that belonging to the town. On entering the house, we found the chief Director in attendance to conduct us over the establishment. We were ushered into the board-room, which contained some excellent paintings, by Ovens, of the Court of Directors engaged in deliberating respecting the admission of children into the establishment, also a painting of Speyght in the act of blowing up his ship opposite Antwerp, and a painting of the ship exploding in the roads of Antwerp. Speyght had been educated in this orphan house. The King had likewise sent to the Directors the sword, epaulettes, and decorations of an officer who had received his early training in this house, and had subsequently distinguished himself and fallen in the service.

From this room we proceeded to the dining-hall, where we found the elder girls at dinner. The dining-hall was from 25 to 30 feet high, and from 60 to 70 feet long. If the array of Directors in their steeple hats, broad white plaited collars, black velvet coats, and huge ruffles, which Ovens had left as a record of the state in which their functions were discharged, to inspire their successors with a sense of the dignity of their office, had somewhat astonished us, our wonder increased when we were led into this spacious hall. 70 or 80 girls, from the age of twelve or fourteen to that of twenty, were at dinner. These were only a small portion of the girls maintained in the house, which contains 220 orphan children. It was the Easter fête, and the girls were attired in their usual Sunday dress: this consists of a richly embroidered muslin cap tied in a knot at the back of the head, with two long silver pins, terminating in a large silver ball, inserted in the cap at the temples, and projecting above the brow. Underneath the cap, on either side of the head, were golden ornaments, either fastened in the hair, or encircling the back part of the head. Most of the girls wore necklaces with a golden clasp in front. The fine white muslin kerchiefs which covered their necks were fastened with a golden pin in front, and we observed several who wore four or five golden rings upon their fingers. The Director informed us that the caps and silver pins were the property of the establishment, but that the golden ornaments, necklaces and rings, were heir-looms belonging to the orphans' families. These heir-looms appeared to be universally possessed. The gown was stuff, one half of which was either a very dark brown or black, and the other half scarlet. The effect of this rich and grotesque costume was increased by the perfect whiteness of the embroidered head dress and neckerchief, and the proverbial neatness which characterises the dress of the Dutch females.

Being a *jour de fête* the dinner consisted of a huge piece of currant cake, with butter and six eggs for each girl. The demeanor of the orphans was respectful and contented, and the manner in which they were greeted by the Director and the female Superintendent was full of kindness. From the dining-hall, we visited the room in which they knit and sew. This was an excellent specimen of the internal comfort and neatness of a Dutch house. The sides of the room were lined with large presses, in which the linen sewed by the girls was kept. We learned that besides the necessary work of the house, other work is taken in from the bourgeoisie of the town, which is executed at a somewhat smaller price than that given to sempstresses in the town, being for that purpose regulated by a tariff. The most remote suspicion of the injury thus inflicted on those who were struggling to maintain themselves above the degradation of dependence did not appear to be entertained. Our inquiries were met by the remark that the work was executed for the bourgeoisie, by whose contributions the establishment was supported.

We proceeded to the kitchen and other domestic offices, the yards, the bedrooms, the sick-house, &c. All these departments were in an admirable state of neatness and order. In one of the bedrooms we were shown a series of deep square recesses or pigeon-holes, and some of the young women were in attendance to exhibit to us the exquisite cleanliness of the dresses and linen which each orphan girl had in store in these receptacles. The Sunday and week-day cap, the neckerchief, the gown, &c., were all displayed with evident feelings of satisfaction.

We passed over to the boys' side of the house. Unfortunately they were all at church; but we inspected the hall where the children are catechised, and also the workshops, viz., the carpenter's shop, the tailor's, &c.

The simultaneous system of instruction which pervades Holland was adopted in the orphan school. By that system the children were taught to read and write, were instructed in arithmetic, geography, national history, and acquired sufficient skill in singing to enable them to accompany the congregation at church. The girls also are taught to knit, to sew, to cut out clothes: they wash, iron, clean the rooms, cook, and perform all the domestic duties of the household, so that they are perfectly well prepared for domestic service.

The boys are to a certain extent taught tailoring and carpenter's work, &c., in the house; but they chiefly receive instruction in industry out of the house, for which purpose they are sent to persons pursuing handicraft trades in the town to learn their several arts, viz., to clockmakers, shoemakers, carpenters, millers, &c. &c. The service is in the first instance given in return for the instruction, but in course of time the boys earn wages, and are at length able to support themselves. The girls come in at all ages, and remain to twenty or twenty-one.

The children are of all religious persuasions; and their religious instruction is confided to the teachers of their respective sects. They go out on Sunday to attend the service of their sect at church.

The strictest separation of the sexes is at all times preserved; hired female servants being employed to perform all the domestic duties of the boys' division of the house.

The establishment is under the direction of six Directors, who are chosen by the King, and are Directors for life. The eldest is denominated "*Père*." The children saluted the Director and the Superintendents of the several departments with demonstrations of respect and gratitude wherever we moved.

We inquired whether the Director thought that the children of the poorer classes obtained as much and as good food, clothing &c., as the orphan children maintained in this asylum, and he answered with marked satisfaction that the children were much better off than the generality of the children of workmen.

The establishment is supported by funds derived from the rents of houses and land, and from the interest of monies in the public securities. The whole direction and control appears to be in the hands of the six Directors appointed by the King. No accounts are published, and no reports are made which are open to inspection; the checks upon maladministration were not evident to us.

The whole establishment was an exaggeration of the relief which must be administered to individuals of the class who are recipients of this unbounded charity. The arrangements for the physical comfort of the children were in every respect so superior to those enjoyed by children of the class of society in which their parents had moved, that it was evident no barrier whatsoever was erected against the dependence of the entire class of orphan children in this or in some of the other orphan houses of the town, and that no limit but the exhaustion of the funds, or the maintenance of all orphans, could confine this all-comprehensive scheme. In such establishments it appears essential to keep in view the necessity of administering the relief afforded to the indigent classes, in such a manner that the natural sympathies of relatives and friends may not be numbed, and that the more healthful agencies which arise from the independent exertion of individual benevolence, may exert their invigorating influence in society. Charity, which invites all and excludes none, discriminating with little or no care between the really indigent and those who have only need of the exercise of greater industry and economy, enervates those whom it is intended to benefit.

The relief afforded to orphan children should embrace a provision for their physical wants, and for their moral and religious training and secular instruction; but it is equally unjust and imprudent to raise the physical condition of such children, supported by public charity, greatly above that of the children of the same class of society who are supported by the unaided industry of their parents. The quality of the relief afforded to their merely physical necessities ought to be such as to create a preference in the minds of their friends and relatives for the exercise of their own sympathies, rather than a dependence on the bounty of society. With this view, the regulations of such establishments should prescribe that the dress and diet of the children should not be superior in quantity or in quality to that obtainable by a labourer for his family. The children of working-men in Amsterdam, and in Holland generally, chiefly eat rye bread, potatoes, oatmeal, and milk. The children of the orphan houses have the best wheat bread, meat, butter, eggs, &c., and in quantities greatly exceeding those of the coarser diet which can be afforded by the self-supported labourer.

Some other restrictions may also be necessary to create and maintain a preference for home training. Such establishments should not be situated in the centre of cities, but at the distance of a few miles, like the nurseries of London. When they are created for agricultural districts, many advantages would be derived from having only one establishment for a considerable area.

Great care should also be taken that the means adopted in the industrial training of children in such establishments do not interfere with the success of self-supported labourers, and that the expedients adopted to procure them situations in service, do not displace the children of the industrious from employment, and diminish their chances of self-support.

But though these expedients may be legitimately adopted, to create a preference in the minds of the children and in the minds of their relatives for the training of an orphan under the roof of a relative, such expedients cannot be employed in the department of religious instruction, or of moral and industrial training, nor in the means adopted for imparting such an amount of secular knowledge, and conveying such an acquaintance with their social duties, as may enable the children to become useful and respectable members of this class in society. Religious instruction and moral and industrial training cannot be rendered meagre in order to prevent the undue reliance of this class of claimants on the public funds, or on the public sympathies; but on the contrary, the standard to be followed in conveying religious knowledge to orphans, and in regulating their moral training, is not certainly to be found in the great majority of the cottages of the industrious classes, among whom it is to be feared the examples of skill and success in these departments of education are rare. We may hope to receive some hints for our guidance from the care which the best instructed artisans bestow on the industrial education of their children; but in the department of secular knowledge we are to be led by clearer lights to do that which we may deem most expedient to render the children hardy, industrious, and intelligent members of the working classes.

In none of these departments can we render the means adopted to instruct and elevate the children meagre, because they may happen at present to be meagre among the poor; we must depend on other circumstances attending their position for the action of a healthful stimulus on the minds of their relatives, creating and sustaining natural sympathies, and the exertions which spring from them.

A Further List of Statistical Papers printed by the Houses of Parliament during the present Session of 1837-8.—(Continued from page 183.)

HOUSE OF LORDS.

- No.
 174 Criminal Offenders—In Counties Cavan, Galway and Wicklow, and in Drogheda, 1836-7.
 185 Edinburgh and Glasgow Railway Bill—Evidence before Select Committee.
 192 Passes to Discharged Prisoners—Number Granted and Forged, 1836-7.
 205 Finance—Exchequer Balances; Debt Created and Redeemed; Advances Repaid, 5th April, 1831-38.
 206 Finance—Exchequer Bills outstanding, 5th April, 1831-38.

- 207 Imports and Exports, United Kingdom—Total Official and Real Value, 1835-37.
 209 Savings' Banks—Number of Depositors and Sums Deposited in last Quarter, 1830-37.
 211 Criminal Offenders—In Counties Dublin, Mayo and Tipperary, and in Dublin, 1836-7.
 214 Finance—Income and Expenditure of United Kingdom, Years ending April, 1831-38.
 227 Oxford and Great Western Union Railway Bill—Evidence before Select Committee.

HOUSE OF COMMONS.

- No.
 387 Metropolis Turnpike Roads—Annual Report of Commissioners.
 459 Caledonian Canal—Annual Report of Commissioners.
 467 Tobacco—Quantities Imported, Entered for Consumption, Sent Out, and in Stock, 1837.
 471 Illegitimate Children—Coroners Inquests on, England and Wales, 1832-37.
 472 Prussian Commercial Union—Treaties, Tariff; Names and Population of States in the Union.
 475 Coal Trade, Port of London—Report of Select Committee, with Evidence.
 477 Law Courts, Westminster—Writs of Trial; Causes Tried, 1837-8.
 488 Combinations of Workmen—First Report of Select Committee, with Evidence.
 495 Land Tax, Middlesex—Assessments made, collected, and paid over; Surplus, 1821-36.
 499 Government Annuities—Stock Received; Amount and Terms of Annuities, 1829-37.
 506 Poor Prisoners, London—Sums paid by County Treasurers, 1836-7.
 519 Deficiency and Exchequer Bills—Amount Held and Advances Made by Bank of England, 1832-38.
 520 Negro Education; Windward and Leeward Islands—Report of Commissioner, 1838.
 522 Bankruptcies and Insolvencies—Number in each Month, 1833-38.
 528 Finance—Public Income and Expenditure under each Head, 1835-37.
 530 Lighthouses, Ireland—Receipt and Expenditure, 1837.
 531 Electors, Ireland—In Continuation of Paper No. 329.
 533 Slave Vessels Captured—Number brought before Courts of Mixed Commissions, 1828-37.
 539 Poor Law Amendment Act—Paper, containing a Report on Causes of Fever in the Metropolis.
 542 Wine and Spirits—Wine, Stock of; Spirits, Imported, Exported, Consumed, and Stock of, 1835-37.
 543 Army Prize Money—Amount Unclaimed, and Application thereof, 1809-37.
 546 Insolvent Debtors—Numbers Discharged and Remanded, 1835-37.
 554 Beer Houses, &c.—Licenses Granted; Insolvencies; Police and Excise Convictions, 1835-38.
 562 Barilla—Quantities Entered for Consumption, 1833-38.
 563 Thames Passengers—Report of Select Committee of House of Lords.
 564 Window Duty—In the 12 Towns in England contributing the Largest Amount.
 584 Army Punishments—Number Imprisoned; Nature of Offences; Term of Imprisonment, 1831-37.
 596 Prisons, Jamaica—Report of Commissioner, 1838.

PRESENTED BY COMMAND OF HER MAJESTY.

Revenue, Population, and Commerce of United Kingdom—Statistical Tables, Part 6, 1836.
 Sickness and Mortality among the Troops in the West Indies—Report.
 Inspectors of Prisons—Third Report, England, Home District.

MISCELLANEOUS:

Abstracted from Parliamentary Papers.

Thames Tunnel—Capital of the Company Expended 180,000*l.*; Amount of Advances made by the Treasury to 2d November 1837, 83,900*l.*, Total Expenditure, 263,900*l.* Estimate, by Mr. Walker, of Cost for completing the Tunnel, 150,000*l.*, and for the other Works remaining to be Done and Purchased, 200,000*l.*, Total Sum required, exclusive of Contingencies, 350,000*l.*

Army Prize Money—Amount of Forfeited and Unclaimed Shares of Army Prize Money, Grants, &c., with the Interest thereupon, from 18th January, 1809, to 31st December, 1837, 1,251,930*l.*, of which 638,525*l.* was refunded to Claimants, and 553,752*l.* was applied to the support of Chelsea Hospital, in diminution of the Annual Vote. The remainder was applied to defraying the expense of carrying the Acts into execution. The present Balance is 102,417*l.*

Armouries, Tower—Number of Persons admitted to see the Armouries in 1837, 14,523, of whom 10,408 paid 2*s.* each. In the four weeks ending 28th March 1838, when the fee was reduced to 1*s.*, the Admissions were 4528, of whom 4196 paid.

Education Board, Ireland—Total Amount of Money issued by the Board of National Education to National Schools in Ireland, from its establishment to 15th December, 1837, 103,252*l.*; of this 26,298*l.* was applied to Building; 9211*l.* to Fitting-up; 54,075*l.* to Salaries; and 13,666*l.* to Books and School Requisites. Ulster received 32,347*l.*; Munster, 21,026*l.*; Leinster, 36,283*l.*; and Connaught, 13,505*l.*

Army Rewards—Number of Soldiers who have established their Claims to Marks of Distinction with Good-Conduct Pay, 3529; Number who have established their Claims to Marks of Distinction, but who decline giving up their Claims to Additional Pay for Length of Service, in order to entitle themselves to Good-Conduct Pay, 8422. Total Number entitled to Marks of Distinction, 11,951.

Marriages—Number of Places in England and Wales Licensed for the celebration of Marriage under the Provisions of 6 and 7 Will. IV. cap. 85, 1136; Number of Certificates for Marriage Granted under the same Act, during the six Months from July to December, 1837, 2343; Number of Marriages celebrated other than according to the Rites of the Established Church during the same period, 1745: of which 453 were in the Superintendent Registrar's Office, and 1292 in Registered Places of Worship, or between Quakers or Jews; 220 were by License, and 1525 on production of Certificate. Number celebrated according to the Rites of the Established Church within the Bills of Mortality in the same period, 6032; of which 5108 were after Banns, and 911 by License.

Merchant Seamen—Registered Seamen serving in British Vessels on 9th June, 1838, 156,872; Apprenticed Seamen serving at the same date, 21,107.

Beer Houses—Licenses taken out in 1835, 39,654; in 1837, 45,394; Increase 14½ per cent.

Consumption of Spirits—Quantities of British and Foreign Spirits paid Duty in the United Kingdom, in 1836, 31,402,418 Gallons; in 1837, 28,943,103; Decrease 7.8 per cent.

Consumption of Wine—Quantities retained for Consumption in the United Kingdom, in 1836, 6,809,212 Gallons; in 1837, 6,391,560; Decrease 6.1 per cent.

Window Duty—Order of the Twelve Towns in England (exclusive of London) which contribute the largest Amount to the Window Duty; Liverpool, 21,467*l.*; Bath, Manchester, Bristol, Brighton, Birmingham, Cheltenham, Leeds, Clifton, Norwich, Cambridge Town, &c., and Portsmouth, 3685*l.*

Insurances on Farming Stock—Total Amount Insured thereupon by Fire Offices in England, in 1837, 44,916,981*l.*

Newspapers—Number in the Year (ending 15th September) 1836, 397; in 1837, 458; Stamps Issued in the first period, 35,576,056; in the second, 53,496,207; Increase 50 per cent.

Thames Passengers—Number who Landed or Embarked at Hungerford Wharf, in 1834, 30,985; in 1835, 142,139; in 1836, 225,974; and in the Half Year ending July 11th, 1837, 174,563.

Caledonian Canal—Total Expenditure thereupon, from its commencement in October, 1803, to 1st of May, 1838, 1,018,808*l.*; Canal Dues received during the same period, 35,125*l.*; Estimate of Sum required to Repair and Perfect the Canal, 143,837*l.*

British Museum—Estimate of Works to complete the Buildings, according to Sir Robert Smirke's plan, 250,000*l.*, exclusive of the Purchase of 10 Houses, and of their site.

Crime in New South Wales—Population in 1828, 36,598; in 1833, 60,794; in 1836, 77,096: Persons Committed for Trial, in 1833, 727; in 1836, 1082; Proportion to Population, in 1833, 1 in 83; in 1836, 1 in 72.

Savings' Banks—Number of Depositors, including Charitable Institutions and Friendly Societies, on 20th November, 1836, 597,959; on same date, in 1837, 635,440; Increase 6·2 per cent.; Amount of Deposits, in 1836, 18,761,219*l.*; in 1837, 19,599,873*l.*; Increase 4·4 per cent.

Exports from the United Kingdom—Total Declared Value, in 1836, 53,368,572*l.*; in 1837, 42,214,938*l.*; Decrease, 11,153,634*l.*=29 per cent.

Deccan Prize Money—Total Value of the Booty captured as Prize Money by the Army in the Deccan, in 1817-18, which had been realised on 20th June, 1838, S. R. 102,22,406; Amount Distributed at the same date, S. R. 98,02,207; Balance S. R. 4,20,299, besides the Nagpore Jewels, in the custody of the East India Company.

Fourpenny Pieces—Number Issued from first Coinage on 14th March, 1836, to 31st March, 1838, 5,359,000; Value 89,325*l.*

REVENUE.

An Abstract of the Net Produce of the Revenue of Great Britain in each of the Years and Quarters ended 5th July 1837 and 1838.

	Years ended 5th July.			
	1837	1838	Increase.	Decrease.
	£.	£.	£.	£.
Customs	19,290,605	18,790,464	..	500,141
Excise	12,163,800	11,439,296	..	724,504
Stamps	6,583,771	6,506,980	..	76,791
Taxes	3,720,175	3,627,204	..	92,971
Post Office	1,471,737	1,544,006	72,269	..
Miscellaneous	48,174	39,106	..	9,068
Imprest Money, Repayments, &c.	797,138	1,025,717	228,579	..
Total Income . . .	44,075,400	42,972,773	300,848	1,403,475

	Quarters ended 5th July.			
	1837	1838	Increase.	Decrease.
	£.	£.	£.	£.
Customs	4,430,385	4,769,400	339,015	..
Excise	2,663,664	2,437,112	..	226,452
Stamps	1,647,939	1,692,134	45,095	..
Taxes	1,609,409	1,609,508	99	..
Post Office	356,737	361,000	24,263	..
Miscellaneous	5,727	10,390	4,663	..
Imprest Money, Repayments, &c.	270,719	448,418	177,699	..
Total Income . . .	10,983,580	11,347,962	590,834	226,452

Total Decrease on the Year £1,102,627.

Total Increase on the Quarter £364,262.

INCOME AND CHARGE.

An Abstract of the Income and Charge of the Consolidated Fund in each of the Quarters ended 5th July 1837 and 1838.

INCOME.			CHARGE.		
Description.	Quarters ended 5th July.		Description.	Quarters ended 5th July.	
	1837	1838		1837	1838
	£.	£.		£.	£.
Customs . . .	4,430,385	4,769,400	Permanent Debt	8,118,650	8,171,157
Excise . . .	2,663,564	2,437,112	Terminable Annuities . . .	712,566	709,104
Stamps . . .	1,647,039	1,692,134	Interest on Exchequer Bills	16,159	19,211
Taxes . . .	1,609,409	1,609,508	Sinking Fund	465,706	..
Post Office . .	348,000	381,000	The Civil List .	113,489	96,400
Miscellaneous .	598,142	479,009	Other Charges .	820,616	541,990
Total . .	11,296,539	11,368,163	Total Charge .	10,247,186	9,537,863
Repayments of Issues from Consolidated Fund in Ireland. .	253,949	..	The Surplus .	1,303,302	1,830,301
Total . .	11,550,488	11,368,163	Total . .	11,550,488	11,368,163

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ending 29th May, and 26th June, 1838.

Quarters ending	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
	£.	£.	£.	£.	£.	£.
29th May .	19,018,000	10,785,000	29,804,000	23,645,000	9,806,000	33,451,000
26th June .	19,047,000	10,436,000	29,473,000	23,364,000	9,722,000	33,076,000

Weekly Average Prices of Corn in England and Wales, in the Month of June, and the Quarter ending Midsummer, 1838.

	Weeks ending June							
	1st.	8th.	15th.	22nd.	29th.	Average of the Month.	Average of the Quarter.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
Wheat .	63 1	64 3	64 11	65 6	67 3	65 0	62 0	
Barley .	31 2	31 4	31 4	30 11	31 2	31 2	30 6	
Oats .	22 9	22 10	22 7	22 7	22 9	22 8	22 3	
Rye .	33 11	33 8	34 5	35 9	36 3	34 9	33 1	
Beans .	37 4	37 7	37 5	37 7	37 6	37 5	36 1	
Peas .	35 5	36 5	36 11	35 8	35 10	36 0	34 6	

BANKRUPTS.

An Analysis of Bankruptcies in England and Wales, showing the Counties and the Trades in which the same occurred, during the months of May and June, 1838.—(In continuation of Account at page 128. To be continued quarterly.)

COUNTIES.	May.	June.	TRADES.	May.	June.
Bedford . . . . .	..	..	<i>Persons connected with</i>		
Berks . . . . .	..	1	<i>Manufactures.</i>		
Buckingham . . . . .	..	1	Cotton Trade	2	2
Cambridge	1	..	Woollen do.	3	2
Chester	2	2	Silk do. . . . .	..	1
Cornwall . . . . .	..	..	Linen do. . . . .	..	..
Cumberland	1	..	Iron do.	6	1
Derby	1	..	Building do.	8	2
Devon	3	4	Miscellaneous	5	13
Dorset	2	..			
Durham	1	..	<i>Agriculture.</i>		
Essex	1	1	Farmers . . . . .	..	1
Gloucester.	6	8	Corn and Hop Dealers	4	3
Hereford	3	..	Cattle and Wool Dealers	3	1
Hertford . . . . .	..	..	Coaches and Horses .	2	..
Huntingdon . . . . .	..	..	Brewers, Maltsters and	1	2
Kent . . . . .	..	1	Distillers		
Lancaster	10	12			
Leicester . . . . .	..	..	<i>Other.</i>		
Lincoln	1	1	Innkeepers and Vic-		
Middlesex	21	23	tuals	13	10
Monmouth . . . . .	..	..	MERCHANTS, Ware-		
Norfolk	1	2	housemen, Agents,		
Northampton	2	2	Brokers, and Whole-	11	16
Northumberland	1	2	sale Dealers		
Nottingham	2	4	Tradesmen, Shop-		
Oxford . . . . .	..	2	keepers, and Retail	37	31
Rutland . . . . .	..	..	Dealers		
Salop . . . . .	..	1	Miscellaneous	3	4
Somerset	1	..			
Southampton	2	..			
Stafford	4	2			
Suffolk	1	1			
Surrey	3	4			
Sussex	2	2			
Warwick	7	6			
Westmoreland. . . . .	..	..	
Wilts	1	1			
Worcester	1	..			
Yorkshire	13	6			
Wales	4	..			
Total	98	89	Total	98	89

JOURNAL
OF THE
STATISTICAL SOCIETY OF LONDON.

SEPTEMBER, 1838.

Second Report of the Irish Railway Commissioners.

THE Second Report of the Commissioners appointed to consider as to a General System of Railways in Ireland, which has just been laid before Parliament, is in many respects a most important and most valuable statistical document.

The Commissioners (whose names are worthy of being recorded on account of this Report, as some of the most eminent contributors to statistical knowledge,)* were appointed to examine the principal lines of communication in Ireland, with reference to the comparative advantages and facilities they will afford for the construction of railways; to consider the expediency and the best means of adopting a general system of railways in that country; to enquire into the best mode of directing the development of this new and important means of intercourse to the channels whereby the greatest advantages may be obtained by the smallest outlay, taking into consideration not only the existing means which the country presents, but those which may be anticipated from the resources which may in future be developed; and, lastly, to enquire what ports on the western or southern coasts of Ireland are best adapted for communication with America, and what facilities exist for the construction of lines of railroad across Ireland to such ports, with the greatest possible collateral benefits to internal traffic.

It would be impossible within the limits of the Journal to give more than an outline of the Report and of the recommendations which it contains, with an abstract of the principal grounds upon which the latter are founded. This outline, however, will be sufficient to acquaint the reader with the nature of the Report, and to enable him with greater ease to consult the original for fuller information.

The Report commences with a general statistical view of Ireland, exhibiting the manner in which the population is distributed and employed—the exports and imports of the country—the amount of the present traffic, and through what channels it is carried on—the number of public conveyances throughout Ireland, and the average number of passengers on every road—with the amount of postage received in the different towns. From this information, the Commissioners have deduced the relative importance of different districts, and the commercial activity prevailing in each. The next branch of enquiry relates to the nature and fertility of the soil—the productiveness of the different districts—the capabilities of improvement which they possess—and the facilities which they afford for railway communications. The geological

* Thomas Drummond, Esq. R. E., Under-Secretary of State for Ireland; Colonel J. Fox Burgoyne; Professor Peter Barlow; and Richard Griffith, Esq.

structure of the country throws great light upon these questions, and the Report contains a very valuable paper upon this branch of the subject by Mr. Griffith.

In illustration of this part of the Report, some beautiful maps on a new plan are given, which places before the eye a picture of the country, representing the distribution of its population and traffic, with its geological features in considerable detail.

The Commissioners state their conviction, founded upon the information thus obtained, that the important public objects anticipated from the establishment of railways in Ireland, are not to be accomplished by separate and isolated lines, but by a well-combined and judicious system, in which the joint traffic of many places and districts should pass to a great extent over one common line.

This principle, and the circumstances above detailed, have guided the Commissioners in selecting the direction of the main trunk lines which they recommend, and which they describe at considerable length. The reports of the engineers employed in surveying the country in these directions, with the engraved plans and sections of the proposed lines which accompany the Report, are well worthy of attention.

The second part of the Report is devoted to an enquiry into the probable return on the capital which would be required to construct and work these lines. To ascertain this point, the Commissioners enter, in some detail, into the economy of railroads, the mechanical principle of their construction, the cost of constructing and maintaining them, and of working locomotive engines, with the means by which the expense may be confined to the lowest scale. The results thus obtained are applied to the previous data respecting the population, produce, and consumption of the districts traversed by the proposed lines, and the Commissioners come to the conclusion that these lines are the best adapted, in the aggregate, to give the greatest return on capital.

The third part of the Report is occupied with the consideration of the circumstances peculiar to the situation of Ireland, and the present condition of its inhabitants, which would render the promotion of such works as are recommended, or any of them, an object of national importance; and of the means by which it might be necessary or advisable to promote them. The Commissioners here examine the peculiar facilities which Ireland offers in comparison with England for a steam communication with America; and devote a chapter to the then agitated, but now settled, question of the practicability of such a communication in the present state of steam navigation. They then proceed to shew the necessity of the most rapid communication between London and Dublin, in order to obtain success for any attempt to establish an intercourse with America by this route, and its importance to the profitable working of railways in any part of Ireland; and they give a statement of projects which have been proposed for effecting this communication. The present condition of the population of Ireland, with a view of the peculiar circumstances which affect it, are next reviewed, and some important facts are added, showing the influence of railways in developing the resources of a country, and improving the moral and physical state of its inhabitants.

The Report concludes with recommendations as to the mode in which

The Appendix contains an outline of the Geology of Ireland, by Mr. Griffith ; suggestions on the powers to be given to railway companies ; the Reports of Mr. Vignoles and Mr. Macneil, the engineers employed to survey the country on the proposed lines of railway ; Captain Evans's Report on the Western Harbours of Ireland ; Mr. Vignoles' and Mr. Cubitt's Reports on Railways through Wales, with several other documents and valuable Statistical Tables relating to the commerce, traffic, and resources of Ireland.

The first part of the enquiry relates to the amount, distribution, and employment of the population.

1731	.	2,010,221			
1791	.	4,206,602	rate of increase per annum	1	per cent.
1821	.	6,801,827	,	1	
1831	.	7,767,401	,	1	
1834	.	7,943,960	,	1	

Distribution of the Population.—To give a distinct view of the manner in which this mass of people is distributed over the country, a map has been prepared, which indicates, by various degrees of shade, the relative densities of the population. It appears that the population is most numerous in the counties of Armagh, Monaghan, and in part of the counties of Cavan and Fermanagh, Antrim, and Down. Diminishing in density, but still furnishing a large proportion to the square mile, the population extends over the counties of Longford, Westmeath, King's, Queen's, Kilkenny, Carlow, and Wexford; and thence a large mass, second only to the northern portion, spreads over the southern counties of Tipperary, Limerick, and parts of Cork and Waterford. Beyond the Shannon lies a district very thickly peopled; and the parts of Roscommon, Leitrim, &c., adjacent to the river, have the same proportion of inhabitants as the midland district.

These four divisions of the population differ exceedingly in social condition, in habits, character, and even in personal appearance. The northern portion are better lodged, clothed, and fed than the others: the wages of labour are higher, being on an average about 1s. per day; and their food consists chiefly of meal, potatoes, and milk. They are a frugal, industrious, and intelligent race, inhabiting a district for the

most part less fertile than the south of Ireland, but cultivating it better, and paying higher rents in proportion to the quality of the land.

In the southern districts the population is in every respect in a worse condition; their habitations are inferior; their food consists at best of potatoes and milk, without meal; their wages are one-third less, or 8d. a day; yet the peasantry are a robust, active, and athletic race; capable of great exertions; often exposed to great privations; ignorant, but eager for instruction; and readily trained under judicious management to habits of order and steady industry.

The population of the midland districts resembles that of the south; but that of the western district is decidedly inferior to both in condition and appearance. Their food consists of the potato alone, without meal, and in most cases without milk; their cabins are wretched hovels, their beds straw; the wages of labour are reduced to the lowest point, not averaging more than 6d. a day. Agriculture is in the rudest and lowest state; a farmer employing labourers, and adopting the improved system of modern husbandry, is rarely to be found; the country swarms with small occupiers; labour brings no adequate return; poverty and misery have deprived the people of all energy, and the great mass of them exist in a state bordering upon destitution.

Looking then to the numbers, condition, and habits of the people within these four great divisions, and to their relative capabilities of benefiting by an improved system of communication, the Commissioners express their opinion that the first efforts should be directed towards carrying lines of railway from Dublin through the northern and southern districts. The population of the western district are not in a condition to profit equally by such works; but greater good would be effected among them by opening common roads, of which in some parts they are in great want.

It will be found that the relative amount of traffic, number of passengers, and other circumstances, unite to confirm this view: they further define more particularly the direction which the lines should follow, and show their respective usefulness and importance.

Employment of the Population.—With respect to the employment of the people, it is essentially agricultural; but in the northern districts numbers of the peasantry, who occupy and cultivate small portions of land, devote their spare time to the domestic manufacture of linen. The culture of flax, its preparation and manufacture, occupy a considerable portion of the population in the counties of Armagh, Antrim, Down, Tyrone, Londonderry, and part of Monaghan.

The number of weavers who manufacture on their own account is decreasing; but as machinery has not yet been so extensively applied to the manufacture of linen as to the spinning of yarn, the hand-loom weaver is still able to hold his ground.

There are in Belfast and its immediate vicinity 15 mills for spinning linen yarn, and 4 at places not far distant. The largest of these mills employs 800 persons, and its annual consumption of flax is 720 tons. No authentic information of the state of the linen trade can be obtained subsequent to the year 1824, when the Linen Board was discontinued. In that year the value of unbleached linen sold in Ireland was 2,580,697*l.*, of which 2,109,303*l.*, or 80 per cent., was sold in Ulster. The number

of acres sown with flax in Ireland in 1823 was 122,242, of which 80,936, or two-thirds, were situate in Ulster. From Returns by the Collectors of Customs it appears that the export of linen from Ireland to foreign countries in 1825 was 55,114,515 yards; in 1835 it was 70,209,572;—shewing an increase of 15,095,057 yards, or 27 per cent. The value of linen exported in 1835 is stated to have been 3,730,854*l*.*

The only town in Ireland in which the cotton trade has been established to any extent is Belfast, and there it is represented as declining. Several mills designed for cotton-spinning are now employed in spinning flax, and there are at present only 6 cotton-mills in Belfast.†

The woollen trade has considerably diminished since 1822. At that time there existed in and about Dublin 45 manufacturers, having 92 billies, employing 2885 hands, and producing annually 29,312 pieces of cloth. The value of this was then stated at 336,380*l*., but there is reason to believe that it did not exceed 200,000*l*. There are now only 36 billies employed in the same district, and the value of goods manufactured is from 90,000*l*. to 100,000*l*.—a decrease of one-half.

In 1822 the returns from the districts of Cork, Kilkenny, Moate, and Carrick-on-Suir, gave the number of 3184 persons employed, and 19,322 pieces manufactured, of the value of 199,100*l*. These amounts are stated a good deal too high, but at present these districts do not manufacture to the extent of 20,000*l*. The flannel trade of Wicklow and Wexford was estimated at 3000 persons employed, and 7800 pieces made, of the value of 54,600*l*.: it does not at present amount to 500*l*. The manufacture, however, of worsted and stuff articles has greatly increased since 1822, and is now carried on to a considerable extent at Mountmellick and Abbeylex.

The wool grown in Ireland was estimated in 1821 at 5000 bags of 50 stones each; it has since increased to about 7000 bags, or from 300,000 to 350,000 stones, in value about 300,000*l*. Irish wool is suitable only to the manufacture of cloth of very low price, and to the worsted manufacture—hence the recent extension of the latter branch. Two-thirds or more of the wool is exported to England and France. The fine cloths of Dublin are beginning to find a market in England. Mr. Willans calculates that the consumption of woollen goods in Ireland does not exceed 1,400,000*l*. per annum. This trade is now in a healthy state, and there is reason to expect its yearly advance.‡

There are no other manufactures of national importance. Of late years, however, the various processes to which agricultural produce is subjected, such as grinding, malting, brewing, and distilling, have been greatly extended and improved. Until lately, Irish wheat was almost

* According to the Returns of the Inspectors of Factories there were, at the close of 1837, 41 flax, hemp, or tow-factories, in Ireland, all of which, with two exceptions, are situated in the north, chiefly at Belfast. The number of hands employed in them was 7810, of whom 3036 were under 18 years of age.

† In December, 1837, the Inspectors of Factories reported that there were 25 cotton-factories in Ireland; those of the largest size, excepting 1 in the county of Waterford, being situated in Belfast or its vicinity. The number of workers employed was 3683, of whom 1738 were under 18 years of age.

‡ The number of woollen or worsted factories in Ireland in December, 1837, was 46, all situated at Dublin or in the southern counties. They employed 1321 hands, of whom 110 were under 18 years of age.

entirely ground at Bristol and Liverpool, but this is no longer the case. Great breweries have been established in Dublin and Cork, and Irish porter is largely exported to England, and successfully rivals that of London, even in the metropolis itself. The quality of Irish produce has also considerably improved. Irish butter, pork, and beef, bring higher prices in the English market than they did some years ago, while the quantity produced and exported has much increased. These improvements are most manifest in the districts of Cork, Waterford, Limerick, and Belfast.

But these signs of growing prosperity are unhappily not so discernable in the condition of the people as in the amount of the produce of their labour. The proportion of the latter reserved for their use is too small to be consistent with a healthy state of society.

Nature and Amount of the present Traffic.—The Commissioners preface this section of their Report with some remarks upon the great want of statistical data in this country, which are worthy of being transcribed at length. “We have had great difficulty in obtaining any information which could be depended on with respect to the important subject of the present traffic of Ireland. Though the value of statistical information is now generally understood and admitted, no steps have as yet been taken in this country towards collecting it to the extent, or with the precision, commensurate to its great importance. The data which such returns furnish constitute, in many cases, the only sound foundation for legislation. They frequently develop relations which it greatly imports the well-being of society to have clearly ascertained and established; and they furnish the most important aid, as well as point out the safest course, in removing impediments to national prosperity, and in promoting judicious improvement. Yet, notwithstanding these advantages, which cannot be disputed, the statistical returns of Great Britain and Ireland, except when relating to revenue, are lamentably defective. And whenever a public enquiry becomes necessary into any matter connected with our social condition, the parties charged with such enquiries find themselves impeded at every step by the want of this information; they are compelled, amidst difficulties which never can be removed, except at a great cost, to begin and collect facts for their own guidance and information, and with very little aid from public records or official documents. Even when a machinery exists, as in the Customs and Excise, which, at a small expenditure, might be rendered available for collecting much valuable information of a statistical nature, no such use is made of it: whenever an article of commerce ceases to be subject to taxation, all accurate information as to its amount, consumption, and distribution, is lost.”

Thus, in Ireland, no account of the trade or of passengers between that country and Great Britain—no details respecting some articles of commerce—no statement of produce brought to the great fairs and markets, or of traffic on the road—can be officially supplied.

In default of these sources of information, the Commissioners had recourse to the constabulary force, through whose assistance, together with returns from the Customs, and the officers of the principal canals, and of some of the largest coach and car establishments, an account of the traffic of the principal towns in Ireland has been prepared and represented on a map by Lieut. Harness, R.E.

A reference to this map shows that the largest line of internal traffic stretches from Dublin to the westward, along the Grand Canal, joining the Shannon at Shannon Harbour, and extending down that river to Limerick. The Shannon is now navigated for the distance of 150 miles by a number of steam-vessels; and a regular and thriving intercourse is established, by means of the Grand Canal, between Limerick and Liverpool.

This canal extends from Dublin to the Shannon, $79\frac{1}{2}$ miles, and thence to Ballinasloe $9\frac{1}{2}$. Its branches are 7, and their aggregate length is $65\frac{1}{2}$ miles: of these, the chief extends to Athy, where it joins the Barrow navigation. In 1822, the total tonnage conveyed on the Grand Canal was 134,939; in 1830, 224,749; and in 1837, 215,910. The tolls in 1837 amounted to 40,859*l.* In 1830, the effect of the introduction of steam-vessels on the Shannon began to be felt on the Grand Canal. The Inland Navigation Company has now 9 steamers on the river, which carried 47,289 tons of goods in 1836; and in the same year conveyed from Limerick to Dublin, for transhipment to Liverpool, 289 tons of wheat, 7158 tons of flour, 1156 tons of oatmeal, and 12,795 firkins of butter.

The following are the remaining principal canals and navigations in Ireland:—

The Royal Canal, which extends from Dublin, through Mullingar, to Richmond-harbour on the Shannon, 92 miles. It has one branch 5 miles long, to Longford. The total receipts in 1836 were 25,148*l.*, and the expenditure 11,912*l.*

The Barrow Navigation reaches from Athy, where it is joined by a branch of the Grand Canal, to its junction with the river Suir below Waterford. In 1800, the tonnage conveyed on it was 19,828; and in 1835 it was 66,084. The tolls in the latter year amounted to 4966*l.*

The navigation of the Suir, which is very imperfect, extends from Waterford to Clonmel, a distance of 40 miles.

The Boyne Navigation is 19 English miles in length, uniting Drogheda and Navan. The tolls in 1837 amounted to 775*l.*

The length of the Newry Canal is $16\frac{1}{2}$ Irish miles; it forms the communication between Lough Neagh and Newry, and thence to the sea. In 1837 the tonnage amounted to 102,332, and the tolls to 3505*l.*

The Tyrone Navigation was executed at the public expense, to encourage the working of certain collieries at Coal Island. The tonnage in 1836 amounted to 7291, of which only 718 tons were coals.

The Lagan Navigation was begun in 1753, to connect Belfast with Lough Neagh. The tonnage in 1836 amounted to 44,700, and the tolls to 2060*l.*

The length of navigation from Belfast to Coal Island is 61 miles, and from Newry to the same place $39\frac{1}{2}$ miles.

The Ulster Canal, which is now completed from Lough Neagh to Monaghan, and will pass through Lough Erne to Belleek, near Ballyshannon, will nearly unite the eastern with the western shore.

The total tonnage carried by all the canals and navigable rivers in Ireland may be taken at about 600,000 tons, and the tolls, at the average rate of 1*d.* per ton a mile, at 71,242*l.* The average distance which the above tonnage is carried is 30 miles.

The quantities of agricultural produce brought from the interior to the several ports of Ireland is estimated at 1,225,000 tons, of which 700,000 tons are for exportation, and the remainder for consumption in the ports.

The return, or import trade, is computed at 385,000 tons; there then remain materials for building, fuel, and manure, the supply of which varies greatly with the circumstances of each port.

Lieutenant Harness has made the following estimate of the inland traffic to and from the several ports :—

Towns.	Supposed present Population.	Traffic to the Town.	Traffic from the Town.	Total.
Dublin . . .	265,000	418,000	362,000	780,000*
Cork . . .	100,000	261,200	139,600	400,800
Belfast . . .	63,000	157,300	207,000	364,300
Limerick . . .	70,000	232,000	32,400	264,400
Waterford . . .	29,000	155,800	80,000	235,800
Galway . . .	36,000	199,200	13,900	213,100
Londonderry . . .	10,600	58,400	67,500	125,900
Drogheda . . .	17,200	67,700	39,900	107,600
Newry . . .	14,600	53,700	51,000	104,700
Sligo . . .	18,000	92,450	10,200	102,650
Wexford . . .	12,000	53,300	33,900	87,200
Dundalk . . .	10,500	55,350	28,400	83,750
Youghal . . .	10,000	38,900	32,700	71,600
Tralee . . .	10,600	55,100	3,100	58,200

The remaining ports are inconsiderable, both as to population and trade.

The value of the trade of the principal ports in 1835 is shewn in the following Table, which includes the coasting trade with Great Britain :—

PORTS.	Value of Imports.	Value of Exports.	Total.
Belfast	3,695,437	4,341,794	8,037,231
Dublin	4,430,321	2,528,543	6,958,861
Cork	2,751,684	2,909,846	5,661,530
Waterford	1,274,154	1,821,245	3,095,399
Londonderry	708,054	1,040,918	1,748,972
Newry	568,711	616,836	1,185,547
Limerick	323,740	726,430	1,050,170
Wexford	621,417	312,136	933,553
Drogheda	259,854	766,027	1,025,881
Dundalk	107,953	452,813	560,766
Sligo	124,692	369,490	494,182
Galway	88,268	251,864	340,132
Youghal	28,310	215,316	243,626
All other Ports.	354,502	1,041,555	1,396,057
Total	15,337,097	17,394,813	32,731,910

* At p. 15 of the Report the traffic to and from Dublin is stated at 966,000 tons; the above figures are taken from Lieutenant Harness's Report in the Appendix.

The total tonnage of imports and exports, in the several ports, arranged according to their importance, was as follows in 1836 :—

	Tons.		Tons.
Dublin	590,000	Drogheda	90,000
Belfast	315,000	Newry	90,000
Cork	280,000	Galway	73,000
Waterford	248,000	Wexford	70,000
Limerick	121,500	Dundalk	66,000
Londonderry	94,000	Youghal	58,000

The Returns from the Post-office afford another test of commercial activity, and the amount of postage from the 8 most productive counties in 1836 was as follows :—

Dublin	£75,726	Limerick	£9,185
Cork	25,415	Down	8,824
Antrim	16,587	Waterford	7,325
Tipperary	10,845	Kilkenny	4,688

The manner in which the several banks are distributed over the country, and the recent date of their establishment, are also worthy of observation. By far the greater number have been opened since 1833. There are—

In Londonderry county 14 banks, of which 5 are in the city of Londonderry.			
Cork	17	4	Cork.
Antrim	16	6	Belfast.
Armagh	14	6	the town of Armagh.
Waterford	7	4	the city of Waterford.
Galway	10	4	the town of Galway.
Tipperary	13		
Down	7		
Limerick city	4		

These facts shew pretty clearly the relative condition and commercial activity of the principal towns and districts of Ireland. The preponderance of Dublin, Cork, Belfast, Limerick, and Waterford, with their surrounding districts, is very great, and establish their claim to be leading points in any system of railway communication. With respect to the south of Ireland, it appears expedient that the main line should be carried through that extensive and important portion of the country which is bounded on the east by the Barrow, on the west by the Shannon, and stretches southward from the Grand Canal to the sea, containing more than one-third of the whole population of Ireland,—the great towns of Cork, Limerick, and Waterford,—the less important but thriving towns of Kilkenny, Clonmel, Cahir, and Thurles, and possessing generally a soil of great fertility.

To the westward, the country is provided with two great canals, more than sufficient for its wants in that direction ; but to the north of the Royal Canal, and towards Belfast, there exists no great line of communication except by common roads. On referring to the traffic map, it appears that a considerable stream of traffic, supplied from Virginia, Kells, and Enniskillen, passes from Navan towards Dublin ; while the country approaching Belfast is traversed in every direction by small streams of traffic, strongly indicating the industry, activity, and trading spirit of that important district.

In the district north of Dublin, the general direction of the trade is towards the coast. A railway from Dublin, by Navan and Armagh to Belfast, would therefore, in the first part of its course, receive at Navan

all the traffic from that town, augmented by contributions from Virginia, Kells, and Enniskillen; it would again fall in at Armagh with the course of trade to and from Belfast: but in the intervening distance it would cross and intersect the stream of traffic flowing towards the coast, and would therefore be of very little service in facilitating and promoting the carrying trade of this part of the country. It is on the conveyance of passengers that this line of railway must rest its chief claim to support as a work of public utility; and in this respect it would possess advantages over almost any other line in Ireland.

The state of travelling throughout the country, and the relative amount of passenger traffic on different roads, is an important point for consideration in estimating the comparative eligibility of various lines of railway.

A map prepared by Lieutenant Harness shews the direction and relative amount of travelling throughout the country, and denotes by figures at the side of the lines the average number of persons passing weekly, by public conveyances of all kinds, between the various places on the map.

From this it appears that the largest stream is from Dublin towards Naas, where it divides into three branches: the first, passing by Carlow, Kilkenny, and Clonmel, to Cork; the second, by Mountrath, Roscrea, and Nenagh, to Limerick; while the third, passing along the Grand Canal, is chiefly dissipated among the small towns on its banks, a small portion reaching Ballinasloe.

Next in importance are the streams through Balbriggan and Ashbourne, uniting at Drogheda, and continuing thence to Newry; at which town a branch separates towards Armagh, where it is again subdivided into smaller branches, the principal of which pass by Caledon to Omagh and Strabane, on the left, and to Moy, Dungannon, and Cookstown, on the right. The main line from Newry continues through Lisburn to Belfast. Next in magnitude to these two great lines is the stream running directly to the west, through Lucan, Maynooth, Enfield, Clonard, and Kinnegad, where a branch separates to Athlone by Kilbeggan; the main line continuing to Mullingar and thence to Longford; from which a small stream passes through Carrick-on-Shannon and Boyle to Sligo. The Athlone branch continues to Ballinasloe, where another small division takes place, a portion diverging to Tuam and Castlebar, while the larger passes by Loughrea to Galway. The Royal Canal runs close to the main route, touching it at several points; passing by Mullingar, and communicating with Longford by a branch from Killashee. Swift boats are now established as far as Mullingar, 52 miles from Dublin, which they reach in 8 hours; and the common or slow passage-boats ply regularly between Dublin and Longford, performing the journey in 23 hours. Next in point of consideration is a stream to the north-west; it branches off on the left at Clonee to Trim, and to Navan on the right, passing through the latter place to Kells, Cavan, and Enniskillen.

Applying this information, with the previous data, to the particular lines, which seem to promise the greatest advantages, the Commissioners have formed an estimate of the traffic and travelling which may reasonably be expected on them. It is as follows:—

	Miles.	Average Number of Passengers moved over every Mile daily.	Average Number of Tons moved over every Mile daily.	Average Daily Receipts.						Total Daily Receipt for Passengers and Goods.		
				Passengers at 1½d. per head per Mile.			Goods at 2d. per Ton per Mile.					
South Western Line to Cork, with branches to Limerick and Kilkenny	228½	342	87·37	£.	s.	d.	£.	s.	d.	£.	s.	d.
Northern Line, through Armagh to Belfast . . }	121½	456	67·41	407	18	11	167	9	10	575	8	9
				288	10	5	56	16	7	345	6	0

Geology.—The precise course of the proposed lines of railway has been in a great measure determined by the features and conformation of the country. Certain geological formations in Ireland are uniformly found to offer peculiar facilities for such works. Not only are they easily traversed, but they furnish excellent and abundant materials for construction; they are remarkable also for general fertility, and they contain all the elements most valuable for improving and reclaiming land. This leads us to a brief review of the geology of Ireland.

Though the geological structure of that country is similar to that of England, still the relative geographical position of the various rocks is essentially different. In England the mountain ranges, consisting of the primary and transition classes, are situate near the west coast, and the newer strata are successively accumulated on each other to the east and south, in which directions the country is comparatively flat. In Ireland, on the contrary, the coast is for the most part mountainous, while the interior is flat, and seldom presents hills of considerable elevation. Thus the primary mountains of Antrim, Derry, and Donegal occupy the north and north-west coasts; those of Sligo, Mayo, Galway, and Kerry, the west and south-west. The slate districts of Cork and Waterford form the south and south-east; while the mountains of Wicklow, Louth, and Down, are situate on the east coast.

These mountain-tracts rarely extend more than 20 miles inland; and we find the interior, with trifling exceptions, composed of flat or gently swelling grounds, covered by a rich and fruitful soil. This peculiar conformation of the surface has been the origin of the great number of rivers with which the coasts abound; they have their sources in the neighbouring mountains, whence they flow in short but rapid courses directly into the sea.

The Shannon forms the most striking example of the rivers of the interior, flowing slowly through the flat country. There are several other rivers which have their origin in the central districts, but they are insignificant in comparison with the Shannon. They all exhibit the same sluggish character, and, when the slow current of water is interrupted by any impediment, have the same tendency to flood the flat country, on either side, for a considerable extent.

By far the greater part of Ireland presents a formation of carboniferous or secondary limestone; but as the exceptions are chiefly confined to the coasts, it may be said that almost the whole of the centre of the country offers this feature. The principal exceptions are in the south-west, where coal prevails over the west of the counties Clare, Limerick,

Kerry, and the principal part of Cork. In the south-east, graywacke slate extends along the coast from the middle of the county of Waterford nearly to Kingstown. The same slate is again found in the county Louth, and extends over parts of Cavan, Monaghan, Armagh, and Down. Then commences the tabular trap, which extends over the whole of Antrim and the eastern part of Londonderry. The remainder of the latter county, with the principal part of Donegal and Tyrone, presents a formation of mica slate, which also extends over the western parts of the counties of Mayo and Galway. The north-western extremity of Ireland consists almost entirely of granite and quartz. The latter formation is rarely found in any other part of the island; the former only in three districts to any extent. First, in a line running from Kingstown, in the county Dublin, across Wicklow and Carlow, to a short distance beyond the Barrow, separating in the first half of its course the bed of graywacke slate, and in the second dividing the secondary limestone from the slate. The second bed of granite unites the southern parts of the counties of Down and Armagh. The third extends over a considerable portion of the county Galway, westward of the town.

The characteristic feature of the limestone country is flatness, and the soil, with the exception of the boggy districts, is unusually fertile. In many parts most valuable quarries have been opened, and abundance of stone, of very large dimensions, can be procured for every architectural purpose. Beautiful marbles of various tints occur abundantly in different places, more particularly at Kilkenny, Limerick, Galway, Cork, King's County, Roscommon, and Armagh. In some of the schistose districts valuable beds of fine-grained roofing slate have been discovered and opened. The chief of these are situated in the county of Tipperary, on the banks of Lough Derg, on the Shannon; at Glenpatrick, south of the river Suir, in the county of Waterford; and at Valentia Island, on the west coast of the county of Kerry. Good veins of slate also occur to the east of Strangford Lough, in the county of Down, in some parts of the counties of Armagh, Monaghan, in Wicklow, Wexford, and the south coast of Cork.

With respect to metallic mines, veins both of copper and lead have been discovered and partially worked in many of the primary slate districts of the counties of Donegal and Galway, and in the granite slate districts of the counties of Down, Armagh, Monaghan, Wicklow, Wexford, Waterford, Cork, and Kerry; also in different parts of the great central limestone district.

At present few of these mines are in operation. Among the copper-mines the most important are those of the vale of Ovoca, in the county of Wicklow, which yield from 10,200 to 12,800 tons a year, varying from 4*l.* to 5*l.* a ton; those of Bonmahon, in the county of Waterford, yielding from 4000 to 5000 tons, at 9*l.* a ton; and those of Allihies, near Berehaven, in the county of Cork, producing from 6000 to 7000 tons at the same price. The two latter are highly productive, and give employment to a considerable number of miners and labourers. The remaining copper-mines are one near Cahirciveen, in the county of Kerry, and two near Cappawhite, in Tipperary, all opened since the commencement of 1837; and the Audley mine at Skibbereen, in the county of Cork.

The lead-mines of Ireland have not latterly been prosperous, and few

are at present at work; the most extensive are those at Conlig mountain, near Newtownards, in the county of Down; of Derrynoose, in the county of Armagh; of Lugganure, in the county of Wicklow; and in the limestone district of the county of Clare, at Ballyhicky, near Ennis. The quantities produced cannot be stated.

In Ireland coal occurs in seven distinct localities, which have been called the Leinster; the Slieve Arda, or Tipperary; and the Munster districts, situate to the south of Dublin; the Monaghan, the Connaught, the Tyrone, and the Antrim, to the north of it. The coal consists of two distinct species, non-flaming coal or anthracite, and bituminous or blazin gcoal. The first, with the exception of two beds of trifling importance which occur in Antrim, are confined to the coal districts, situated to the south of Dublin, while the northern contains bituminous or blazing coal.

The Leinster Coal District is situated in the counties of Kilkenny, Carlow, and Queen's County. It contains 7 workable beds of coal, arranged in regular succession, one above the other. The collieries have been worked for upwards of a century, and now produce annually about 120,000 tons of coal and culm. The former is used for domestic purposes and making, the latter for burning lime. The upper beds, which are the purest, are now nearly exhausted; but 3 of the lower beds, which are very extensive, have never been worked.

The Slieve Arda, or Tipperary Coal District.—The general circumstances of this district are similar to those of the latter. It has, as far as is known, 3 beds of coal, the lowest 9 inches, and the second and third 2 feet in thickness. The principal collieries are situated at Colebrook, and at Coolquill, in the neighbourhood of Killenaule. The line of the Main Southern Railway, as proposed by the Commissioners, passes through the midst of the limestone valley, situate between the Slieve Bloom Mountain and the Leinster and Tipperary coal districts. It is probable that by a proper construction of the grate, the pure, though dense, non-flaming coal of these districts may be used with advantage for locomotive engines.

The Munster Coal District is perhaps the most extensive in the British empire; it occupies large portions of the counties of Clare, Limerick, Kerry, and Cork, and coal-mines have been partially worked in all those counties. The coal is usually of a slaty structure, much softer than that of Tipperary or Kilkenny, and is therefore almost exclusively used for burning lime. The principal collieries are situate on the north side of the river Blackwater; and at this moment extensive works are being carried on, particularly at Dromagh and Gurteen Collieries, 10 miles west of Mallow.

From the extent of coal already known in the southern part of this district, no doubts can be entertained of its capability of supplying the country for centuries to come with abundance of culm suitable for burning lime. This circumstance is of the utmost importance to the agriculturists of the south of Ireland, who find lime to be the best manure for raising crops, particularly wheat.

The Monaghan District.—We now proceed to the consideration of the bituminous coal districts, situate to the north of Dublin, and shall commence with that of Carrickmacross, in the county of Monaghan.

In this locality the coal formation rests upon a small tract of car-

boniferous limestone, which is insulated in the central graywacke slate district. Hitherto, though many trials have been made, no coal worth working has been met with; only one bed of 14 inches, one of a foot, and several of inferior thickness, have been discovered.

The Connaught Coal District is situate on the eastern side of Lough Allen, near the sources of the river Shannon, and comprehends portions of the counties of Roscommon, Leitrim, and Sligo. It consists of a group of hills of considerable elevation. The coal occurs in detached basins near the summits of some of the hills: it has never been extensively wrought; and as there is only one workable bed, varying in thickness from 2 to 3 feet, it is not probable that many extensive collieries or manufactories will be established in this district. The Arigna iron-works, which are in it, and which are the only works of the kind in Ireland, have been lately at work, and cast-iron of excellent quality can be made there at a moderate expense. The coal, though thin, is well adapted for the smelting of iron; the iron-stone is peculiarly rich, and limestone is abundant in the neighbourhood.

The Tyrone Coal District, which is situate to the north of Dunganon, in the county of Tyrone, though very small, is much richer in valuable beds than any other in Ireland. At present 9 workable beds are known, varying from 3 to 9 feet in thickness. At Coal Island 6 beds have been discovered and worked with various success during the last century; but the stratification of the district is so imperfect, and the consequent difficulty and expense of working the mines have been so great, that the adventurers have seldom obtained any considerable profit from them.

The Antrim Coal District is situate on the north coast of the county of Antrim, close to Fair Head, and occupies the country on both sides of that headland. The collieries have been wrought at a very remote period, but at present no coal is raised in the district, owing partly to the difficulty of working to the dip of the old excavations, and partly from the want of a safe harbour for shipping. At the same time it may be remarked that the extent of coal remaining unwrought must be inconsiderable.

It will be perceived from the foregoing statements that Ireland contains abundance of valuable stone, marble, and slate quarries, many of which are at present in successful operation; and that the metallic mines now at work, though limited in number, are very prosperous; and, should the prices of copper and lead increase, much more extensive works will probably be undertaken. Of the bituminous coal-mines of the northern districts it may be said, that they are inferior both in productiveness and purity of coal to those of Great Britain; but that the anthracitous coal districts of the south are sufficiently extensive, and contain abundance of that coal, which, though less agreeable than the bituminous for domestic use, is most valuable in all cases where a strong and steady heat is required.

The geological formation of Ireland is a valuable guide in determining the best lines for improved internal communication, whether by ordinary roads, by railways, or canals; for it is found that the lowest and most level lines through the country are almost exclusively confined to the carboniferous limestone, and that as soon as the boundaries of that rock are passed, difficulties are encountered which it is desirable to avoid. In

addition, all the populous towns of the interior of Ireland are situate in the limestone country, and nearly the whole of the rich arable pasture-lands are confined within its limits.

It is to be remarked that in these fertile plains less exertion has hitherto been displayed than in other parts of the country where the soil is of inferior quality, but where, owing to the industry of the people, the quantity and the quality of the crop per acre is superior to that produced on the rich calcareous loams. Thus, in the rich plains of Meath and Westmeath, nothing is looked to but grazing and fattening cattle upon the natural produce of the soil, unaided by green-crop husbandry; while the farmers of the slate and granite districts of the counties of Down, Armagh, Louth, Wicklow, and Wexford produce excellent corn and green crops, and the most improved system of husbandry is now being gradually introduced among them.

On the various grounds before stated, which may here be briefly recapitulated—the amount of population which would be benefited; the condition of that population, and their power to profit by the advantages of railway communication; the industry and comparative commercial activity prevailing among them; the comparative amount of traffic and number of passengers; the great towns which would be connected by the least extent of railway; the singular fertility of many of the southern districts; their capabilities of great and extensive improvement; the facilities which they afford for the construction of railways; the importance of connecting Dublin with Cork—the commercial capital of the south—with Limerick, Waterford, and Kilkenny, and with Belfast in the north; and further, on the ground of not interfering with or injuring any existing canal or river navigation—the Commissioners have come to the conclusion that the two following main lines, with the branches described, will confer the most extensive accommodation at the least expense, and afford the greatest return on capital.

The first, being the main line to Cork, should pass near Maryborough, at a little beyond which town it should throw off a branch to Kilkenny. From Maryborough it continues by Thurles to Holycross, where it throws off a branch to Limerick; while the main line, continuing its course through Cashel, winds round the base of the Galtees mountains, close by Cabir, and passes through Mallow to Cork. As part of the same combination, Limerick should be connected with Waterford by a branch crossing a little to the south of Golder, and passing through Clonmel and Carrick to Waterford.

The results of the engineer's surveys on this line are very favourable. The point selected for the Dublin terminus is on the bank of the river Liffey, close to Barrack-bridge, and $1\frac{1}{2}$ mile from the Post-office. The line, as laid down, runs in a southern direction on the right bank of the Liffey, through Palmerstown and close to Lucan. Thence it continues in a south-west direction, passing near to the towns of Sallins, Rathangan, Monasterevan, Portarlinton, and Maryborough. Three miles beyond the latter place it is proposed to commence the branch to Kilkenny, by the towns of Abbeyleix and Ballyragget. The distance between Dublin and the commencement of this branch is $52\frac{1}{2}$ miles, and thence to Kilkenny is $26\frac{1}{2}$ miles, making the total distance from Dublin to Kilkenny 79 miles. From Maryborough the main line pro-

ceeds to within 3 miles of Borris-in-Ossory, where it will receive the passengers and merchandise from that town, with the towns of Roscrea, Castletown, Mountrath, and the surrounding districts. It is also probable that passengers from Galway, Loughrea, and the southern part of the county of Galway, with those from Parsonstown and its neighbourhood in the King's County, will join the railway at this station. From Borris-in-Ossory the line continues in the same direction, near Rathdowney, Templemore, and Thurles, to Holycross, where the line to Limerick diverges. The distance from Dublin to Holycross is $89\frac{1}{2}$ miles, thence to Limerick $35\frac{1}{2}$ miles, making the total distance to Limerick $125\frac{1}{2}$ miles.

From Holycross the main Cork line proceeds in a southerly direction to Cashel, and thence to Marhill, near New Inn, in the county of Tipperary, at which point it is intended that the line to Clonmel and Waterford should commence. But, in order to complete a direct railway communication between Limerick and Waterford, it is proposed that this branch line should be continued in a western direction, from Marhill towards Limerick, crossing the river Suir at Golden, and joining the line from Holycross to Limerick at Donaghill. The distance from Marhill to Donaghill will be 13 miles. The distance from Dublin to Marhill is $104\frac{1}{2}$ miles, and from the latter place to Waterford 37 miles.

From Marhill the Cork line follows the valley of the river Suir to Cahir, passes through the narrow valley interposed between the Galtees and Kilworth mountains, whence it continues by Mitchelstown to Kildorrery, and thence to the town of Mallow. The valley of the Blackwater, at Mallow, offers a very favourable line for the extension of the railway at some future period to Killarney, which is only 40 miles distant. This line would open a place of great resort to visitors, and would connect the extensive culm-collieries near the Blackwater with the interior of the limestone country, where fuel, and particularly culm, is much wanted for burning lime, both for building and agriculture. From Mallow the main line takes a southern direction to Cork.

During the year 1837 an Act of Parliament was obtained for constructing a railway between Dublin and Kilkenny. The Commissioners have examined fully into the line selected by this Company, and have enquired at much length how far it may be made part of their plan, or how their plan may be altered to unite with it; but they report that, as Ireland has not sufficient internal traffic to support distinct lines between the several important places, a combined system is necessary; and that the object sought being the best communication, consistent with economy, between the leading cities of Dublin, Cork, Limerick, and Waterford, the direct line to Kilkenny is deficient in both respects.

A project is already in contemplation for extending the Dublin and Kingstown Railway to Bray, and a detailed survey has been made, with estimates, which appear to justify the undertaking as an isolated measure. It may hereafter be found desirable to continue the line through the county of Wicklow to Wexford.

Turning towards the north, the leading object for consideration is to connect Belfast and Londonderry with Dublin. In these directions both the physical and geological structure of the country present many difficulties which do not occur on the southern lines. The limestone

district, so favourable to the construction of railways, ceases at the rivers Blackwater and Boyne, and the greater part of the country to the north of those rivers is composed of transition slate rocks, or of crystalline granite or green-stone, and the whole country is either hilly or mountainous. The direction of the ridges also is usually south-east, directly across the desired line of communication.

Previously to the appointment of the Commission, Acts of Parliament had been obtained for constructing a line of railway coastwise from Dublin to Drogheda, and also inland from Belfast, by Lisburn and Lurgan, to Armagh.

Surveys had also been made from Drogheda, in continuation of the coast-line, by Dundalk to Newry, and thence, parallel to the Newry Canal, to Portadown, where it joined the Belfast and Armagh line. Another survey was made to connect Dublin with Armagh by an inland line crossing the Boyne, nearly midway between Drogheda and Navan, and continuing thence by Ardee and Castleblaney to Armagh. Several other surveys of a less important character had likewise been made to connect inland towns with the coast; the greater number of which were intended for tram-roads, to be worked by horses. One of these extended from Drogheda to Longford, through Navan and Kells; a second from Dundalk to Cavan, through Castleblaney and Cotehill; and a third from Portrush, on the north coast of Antrim, to Armagh, through Coleraine and Kilrea.

With these surveys before them, and weighing the natural difficulties of the country, the Commissioners, after proper surveys were made, determined that the best lines for internal communication to the north and north-east of Ireland run through Navan, Carrickmacross, and Castleblaney to Armagh, and through Navan, Kells, Virginia, and Cavan to Enniskillen. An Act of Parliament having been obtained for a railway between Armagh and Belfast, the Commissioners adopted the line as the continuation and completion of their main line to the latter town.

The first 28 miles from Dublin to Navan are common to both the Armagh and Enniskillen lines; at that town they diverge, that to Belfast taking a northerly course, by Carrickmacross and Castleblaney to Armagh. The distance between Navan and Armagh is $57\frac{1}{2}$ miles, and the total distance from Dublin to Armagh $85\frac{1}{2}$ miles. The Enniskillen line continues from Navan up the valley of the River Blackwater, passing through Kells and Virginia. As far as Kells the country is unusually favourable; but between that point and Cavan, and thence to Newtown-Butler, in the county of Fermanagh, the character of the district is hilly, and the expense of construction will be proportionably increased. Beyond that town the line passes through the flat country, skirting the north-eastern margin of Upper Lough Erne, to Enniskillen. This may be considered a central station to which passengers and commercial traffic may be expected to converge within a considerable circuit, including the important towns of Londonderry, Letterkenny, Strabane, Omagh, Donegal, Ballyshannon, and Sligo; and hence it is chosen as the terminus of the north-western railway. At some future time it may be expedient to continue this line to Londonderry, through Strabane, Newtown-Stewart and Omagh; but at present

the intercourse would not justify such an extension. The distance from Dublin to Enniskillen is 96½ miles; from Navan it is 68½ miles.

Among the lines proposed by private companies, the Commissioners examined that proposed by the Great Central Irish Railway Company, to run from Dublin to Mullingar, and to be continued thence by Longford and Carrick-on-Shannon to Sligo; with another line, which has also been laid out from Mullingar, by Athlone, Ballinasloe, and Loughrea, to Galway. They report that such lines would greatly injure the Grand and Royal Canals, without being able to support themselves.

It would be impossible to follow the Commissioners in their enquiries into the best modes of constructing and working railways, or into the detail of the estimates which they have prepared for the proposed lines; such information would only be useful in a very full and detailed form, in which it would not be fitted for the present paper. It will be sufficient therefore to say, that the Commissioners consider that, in Ireland, 10,000*l.* to 12,000*l.* per mile may be generally made to cover all the charges of the construction and appointments of a railway. They estimate the annual expense of working each engine at 1750*l.* per annum, and the carriage, and other expenses attending the locomotive, at 875*l.*; the remaining expenses of a line they calculate at as much more, 2625*l.*; making the whole expense per engine 5250*l.* The medium day's journey of an engine may be estimated at 80 miles; therefore assuming a charge of 2*d.* per ton, and excluding Sundays, the expense of working an engine will be covered by its carrying through the whole distance a net load of 25 tons: all that it takes beyond this will be applicable towards a dividend on the capital expended. The Commissioners estimate the expenses of constructing the south-western main line, with its branches, as follows:—

Main line, 166½ miles, at 11,000 <i>l.</i> per mile . . .	£1,831,500
Kilkenny Branch, 26½ miles, at 8000 <i>l.</i> per mile . . .	212,000
Limerick „ 35½ „ at „ „ . . .	286,000

Total cost of construction £2,329,500

The total surplus revenue is estimated at 82,187*l.*, which would yield a dividend on the above capital of about 3½ per cent.

The cost of the Waterford and Limerick branch from the former town to Donaghill, where it joins the Limerick branch, is estimated at 400,000*l.*, being 50 miles, at 8000*l.* a mile. The surplus revenue is calculated at 15,337*l.* per annum, which would yield a dividend of 3·8 per cent.

The cost of the northern lines, according to Mr. Macneil's Report, is as follows:—

From Dublin to Navan	£257,518
„ Navan to Armagh	777,595
„ Navan to Enniskillen.	865,218

£1,900,326

Stations and Carrying Establishments . . . 114,720

Total cost £2,015,046

According to the estimate of the Commissioners the whole annual receipt on these two lines will be 126,106*l.*, which will yield a dividend of 4·32 per cent. if the construction cost 12,000*l.* per mile, and 5·18 per cent. if it cost 10,000*l.* a mile; the mean being 4·75 per cent, at

11,000*l.* per mile. All the estimates of traffic and passengers have been taken on a very low scale, and there is every reason to expect a considerable increase upon the revenue here stated.

It was part of the duty with which the Commissioners were charged, to enquire whether Ireland, as compared with England, offers any peculiar facilities for a steam communication with America, and how far they might be improved and increased. It is obvious that, as Ireland has itself little or no traffic with America, and as it will be long before it will have any, the freight of any vessels leaving its ports, whether passengers or goods, will come almost exclusively from Great Britain. The enquiry, therefore, resolves itself into three questions:—First, are the superior facilities afforded in departing from Ireland sufficient to compensate for the expense and inconvenience of a conveyance of the freight across Ireland to the port of departure; or, secondly, would it be more advantageous to make the voyage direct from Great Britain; or, thirdly, would a middle course be advisable;—namely, that steam-vessels should take in the bulk of their cargo, fuel, &c. in Great Britain, and touch at an Irish port for a portion of their passengers and cargo, fuel, and other sea-stores? With regard to the first point, the Commissioners consider that vessels departing from any port in Ireland for general purposes could not in any way compete with those leaving Great Britain direct, which necessarily implies the affirmation to the second proposition. The adoption of the third course would depend upon the degree of importance attached to the addition in the stowage of freight, which would in such case be obtained by the reduction in the stock of fuel; by the probability of obtaining passengers and goods in Ireland; and by considering how far these advantages would compensate for the delay and prolongation of the entire voyage, occasioned by touching at an intermediate port. It is probable that vessels from Liverpool and Glasgow would find in the supply of fuel a good reason for touching at the most convenient westward port in Ireland, and, if advantages were experienced by passengers in embarking at the same port, the inducement would be greatly increased; but, in the present state of Ireland, the travelling to such port by the common road would be attended with little saving of time, and with a great increase of trouble, fatigue, and expense. The selection, therefore, of a western port in Ireland does not appear, at present, to be a consideration of great importance; but it remains to be seen how far these circumstances might be altered by railways.

The four ports, which are at all suitable for the object proposed in this enquiry, are Tarbert, on the Shannon, Valentia, Berehaven, in Bantry Bay, and Cork. Of these Cork presents, in every respect, the greatest advantages. Both Berehaven and Valentia are far removed from any existing establishment, or from the resources that might be useful to a station of departure for America. They are besides respectively only 69 and 87 miles westward of Cork. Tarbert possesses the advantage of an immediate connection with Limerick, but it is completely out of the course of vessels from England and Scotland. A railway, moreover, to either of these ports would not be likely to maintain itself.

The Commissioners therefore consider that, on the whole, Cork, under present circumstances, will answer every purpose for which a western

port can be required to promote a steam communication with America. It offers at present no other advantage than that of a port where vessels may complete their supply of fuel previous to taking their final departure. But by the establishment of a railway from Dublin to Cork, and also of the most improved and rapid railway and packet communication between London and Dublin, which the Commissioners assert is also indispensable, the intercourse with America may be accelerated to the utmost degree of which it is at present susceptible. With the view of determining the speediest mode of communication between London and Dublin, the Commissioners have had surveys made through Wales, and several projects are contained in their Report for railways from London to the Welsh coast. Of these the two most eligible appear to be those to Holyhead and to Porth Dynllaen on the coast of Carnarvonshire, the difference between those two lines in point of time being very small. The following table will shew the lines which have been projected, and their respective merits as regards speed.

Rates at which it is calculated that the Mails may be conveyed from the Post Office in London to that in Dublin, by the construction of the several projected Railways.

English Port.	Distance from London.	Time by Railway.	Irish Port.	Length of Voyage.	Time on Voyage, including 30 min. for embark- ing and sailing.	Time from Irish Port to Dublin, including land- ing.	Whole Time.	Hour of Arrival in Dublin.	Hour of Departure from Dublin to London.
	Miles.	P. M.		Stat. M.	H. M.	H. M.	H. M.	H. M.	P. M.
Holyhead . .	97½	10 35	Kingstown	63	6 48	0 30	17 53	1 53 P. M.	11 7 A. M.
Liverpool . .	910	8 17	Ditto.	130	13 30	0 30	22 17	6 17	6 43
Ormes' Bay . .	230	9 1	Ditto.	96	10 6	0 30	19 37	3 37	9 28
Porth-Dynllaen	260	10 8	Ditto.	70	7 30	0 30	18 8	8 8	10 52
Porth-Dynllaen	260	10 8	Wicklow .	60	6 30	1 23½	18 1½	2 1½	10 56½
Fishguard . .	260	10 8	Ditto.	79	8 24	1 23½	19 55½	3 55½	9 41½

One half hour is allowed from the post-office in London to starting on railway; 27 miles per hour for the railway; 30 minutes from railway to embark and sail; 10 miles per hour for steam-packet voyage; 2 hours additional for return to London, to allow for occasional long passages by sea. Hour of leaving London, 8 P. M.; hour of arrival, 7 A. M.

The Commissioners conclude their Report with an enquiry into the nature and amount of the assistance which should be afforded by the Government towards the prosecution of these undertakings. They show the present anomalous and miserable condition of the Irish peasantry;—they enumerate the advantages which the establishment of railroads would confer upon them, as well as upon the nation at large by the increased revenue which would arise from any improvement in their condition;—they enlarge upon the influence which railways have had elsewhere in developing the resources of a country, as well as the improvements which have been introduced in Ireland itself by the extension of internal communication and by steam navigation—and they conclude by recommending an immediate and liberal attention to the claims of Ireland for assistance, which cannot be conferred in any shape more likely to prove beneficial than by encouraging public works of extensive and permanent utility, which will afford the means of present employment of a steady and remunerative nature to a large

body of the people, and at the same time lay the foundation of their future improvement and prosperity. If parties can be found to undertake the proposed lines it would doubtless be the best policy to leave them to their own independent exertions; the Government removing every impediment over which they have any control, by granting the necessary Act of Parliament without expense, as for a public purpose, and taking steps to prevent any exorbitant or unnecessary charges for remuneration for the land required. There can be no doubt that capitalists would be found to undertake certain portions which hold out special prospects of advantage—such, for example, as the first 20 or 30 miles out of Dublin; but it is not so certain that they could be induced to undertake the whole of the proposed lines, upon which, as has been shewn, the profit is not likely for some time to exceed 3 or 4 per cent. At all events it is most desirable, and the efforts of the Government should be directed to combine the whole of the proposed lines into one interest, and under one management and control, or at most into two, the northern and the southern. Should private parties not be found willing to advance capital for the undertaking, the Commissioners suggest that the Government should advance, by way of loan, a considerable proportion of the amount of the estimates, at the lowest rate of interest, and on the easiest terms of repayment, to be secured by a mortgage of the works. They think that many landholders may also be found to subscribe towards carrying into effect an object, which, in addition to its importance as a national concern, cannot fail to benefit and improve their own properties. As a further assistance in filling the subscriptions, perhaps powers might be given to the counties interested, as well as to corporate towns, to become shareholders to certain amounts; the Government, in such cases, advancing the money on the security of presentments in the usual manner, and the return on such shares being available for the reduction of the county or other rates.

If these means be rejected, or fail to produce sufficient subscriptions to insure in the first instance the execution of the entire system, it is suggested that the work might be commenced at Dublin, or any other fixed point, and be continued as far as the funds will admit; such portion, however, not to be considered as an integral line, but only as part of the general system, and to be continued from that point to the ultimate intended termini as soon as new subscriptions are received.

Lastly, the Commissioners suggest that the Government should undertake either or both of the proposed lines, on the application of the counties interested; the outlay to be repaid by small instalments, at the lowest admissible rate of interest, and under the provision that, in the event of the returns not paying the stipulated amount of interest, the counties shall supply the deficiency by presentments. Should either of these suggestions be adopted, the Government will possess a share in the direction of the works; but even if they be undertaken without public aid, the Commissioners are of opinion that they should, in a certain degree, be subject to the control of the State; for that the public interest requires that the parties undertaking them should be subject to such conditions, and held subject to such well-considered regulations and effective control, as shall secure to the country at large the full benefit and accommodation of this admirable system.

R.

A Statistical Enquiry on Fever, &c. By ARTHUR SAUNDERS
THOMSON, M.D., &c.

THERE is no science in which statistical investigation is more necessary than in medicine; and there are few to which it has hitherto been less applied. The physician knows that certain medicines produce certain effects, that certain diseases usually last a certain time, and that some are more fatal than others; but he has never or rarely ascertained this by numerical computation: his knowledge is the result of an experience dependent upon memory alone, and liable to be influenced by partial or prejudiced views; and if he were to be asked what were the average duration of a disease, or in what proportion one disease were more fatal than another, he would be at a loss for an answer. On the Continent, the true value of statistical investigation, in ascertaining the results of diseases, has long been duly estimated; but, in this country, the advantage of employing enumeration to obtain those results and to investigate general facts has only of late years come into importance.

Dr. A. S. Thomson has lately collected together, and published in the *Edinburgh Medical and Surgical Journal*, such statistical information as he has been able to collect respecting Fever in this country, and has endeavoured to ascertain from these sources the prevalence, susceptibility, intensity, and prognosis of the disease. The medical man will find advantage from consulting the statistical details contained in this valuable paper; but the following results, briefly stated, may not prove uninteresting to the general reader:—

1. The annual ratio of deaths from fever in London have decreased since the commencement of the 18th century.
2. The susceptibility to be attacked by fever is greatest among individuals under 10 years of age, and from 20 to 30.
3. The period of life during which the highest ratio of mortality occurs from fever is from 40 to 50.
4. There is no very apparent difference in regard to one sex being more susceptible of fever than the other.
5. The annual ratio of deaths by fever is nearly twice as great among the male as the female population.
6. There is about 1 death for every 15 persons attacked by fever.
7. The intensity of fever increases with the age of the patient, about 34 per cent. every decennial advance in life.
8. Attacks of fever are one-third more intense among males than females.
9. Fever is most prevalent from July to December inclusive.
10. The intensity of fever is much greater during January, February, March, April, and May, than at any other part of the year.
11. During those months in which fever is most prevalent the temperature and quantity of rain is considerably greater than during those months in which fever is not so prevalent.
12. During those months in which fever is most intense the temperature and quantity of rain is comparatively low.
13. Medical treatment has a powerful effect in lessening the danger, or number of deaths from fever.
14. Early medical treatment shortens the duration of fever.
15. The mean duration of fever among individuals under 40 is shorter than among those above that period of life.

16. The general prognosis of fever is favourable, there being 14 chances to 1 that the patient will recover.

17. The prognosis of fever becomes less favourable as the patient is advanced in life, the intensity of the disease being nearly twice as great at 41 years of age as at 21.

18. The prognosis of fever is one-third more favourable among females than males.

19. The prognosis of fever is more favourable from June to December than from January to June.

20. The prognosis of fever is one-half more favourable among patients who come under medical treatment before the 7th day of the disease than among those who are admitted at a later period.

21. The prognosis of fever is unfavourable when there are cerebral or thoracic complications.

22. The second week of fever is the most dangerous. Out of 1000 cases passing through this week 82 died.

On the Rate of Mortality amongst Officers retired from the Indian Army,

BY ROBERT CHRISTIE, ESQ., F.S.S.

[Read before the Statistical Society of London, 18th June, 1838.]

IN the year 1836 I had occasion to investigate, for a Society* with which I am connected, the terms upon which a life policy commenced in India ought to be continued in this country, regard being had to the three classes of persons whose interests are more or less affected by the terms fixed upon, viz., holders of policies on lives retiring from an Indian to a British residence; the holders of policies on lives remaining in India; and the holders of policies on lives permanently residing in Europe.

It is evident that one of the principal elements in the solution of the problem is the rate of mortality which obtains amongst persons after retiring from an Indian residence. On enquiry at the India House and elsewhere, of persons extensively connected with India, I found a very general opinion to exist, that the lives of such persons had received considerable damage by a residence in India, and that the Northampton Table of Mortality, published in 1783 by Dr. Price, might be taken as a tolerably accurate measure of the mortality among such persons. I could not, however, ascertain that these opinions were founded on any basis which could be relied upon, and as I believed that there existed materials sufficient to form a rate of mortality which might serve my purpose, and be useful to others, I applied for and obtained access to the Records of the India House. From these I extracted a list of all the officers who had retired from the Indian army between the years 1760 and 1836, containing—

1. The name of every officer.
2. The presidency to which he belonged.
3. The date of his appointment.
4. The date of the death of such as had died.

From these data, and taking 18 as the average age of arrival of cadets in India (it having been ascertained to be so within a very small fraction), I deduced—

* The Universal Life Assurance Society.

1. The number of years each officer resided in India.
2. His age at retirement.
3. The number of years he lived after retirement till his death, or till the end of 1835.
4. His age at death.

These particulars were entered on the left of sheets of paper ruled with vertical as well as horizontal lines, that the years of existence after retirement might be marked under the respective ages from 19 to 88, entered along the top, distinguishing the deaths by a D, under the ages at which they respectively occurred. Then, by collecting together the number of marks and the number of D's at every year of age, the number living and the number dying at that age were obtained, as shewn in columns B and C in the subjoined Table; and from these were calculated the rate of mortality per cent., as shewn in column D.

It was found necessary to exclude from the list all medical and clerical gentlemen, as their ages on appointment could not be ascertained with certainty.

Preparatory Table of the Mortality amongst Officers retired from the Indian Army.

Age.	Number Living.	Number of Deaths.	Deaths per Cent. by		Calculated No. of Deaths for No. Living, at each age.	No. of Deaths up to each age by		Age.	Number Living.	Number of Deaths.	Deaths per Cent. by		Calculated No. of Deaths for No. Living, at each age.	No. of Deaths up to each age by	
			Experience.	Adjusted Curve.		Experience.	Adjusted Curve.				Experience.	Adjusted Curve.		Experience.	Adjusted Curve.
A.	B.	C.	D.	E.	F.	G.	H.	A.	B.	C.	D.	E.	F.	G.	H.
19	1	0		1.04	.01			54	361	7	1.94	2.73	10	144	153
20	1	0		1.05	.01			55	334	12	3.59	2.86	10	156	163
21	5	0		1.06	.05			56	302	12	3.97	3.00	9	168	179
22	8	0		1.07	.09			57	238	7	2.43	3.15	9	175	181
23	10	0		1.08	.11			58	280	10	3.57	3.31	9	185	190
24	16	0		1.09	.17			59	267	11	4.12	3.48	9	196	199
25	21	1	1.09	1.10	.23	1		60	255	13	5.09	3.66	9	209	208
26	24	0		1.11	.27	1	1	61	243	12	4.93	3.84	9	221	217
27	34	2		1.12	.38	3	1	62	226	7	3.09	4.04	9	238	226
28	43	2		1.13	.49	5	2	63	216	9	4.17	4.25	9	237	236
29	61	0		1.15	.70	5	2	64	204	6	2.94	4.47	9	243	247
30	88	1		1.17	1	6	3	65	195	5	2.56	4.79	9	248	256
31	112	0		1.19	1	6	4	66	190	12	6.84	4.99	9	261	265
32	137	0		1.21	2	8	6	67	177	13	7.34	5.21	9	274	274
33	146	2	1.37	1.23	2	8	8	68	163	9	5.52	5.58	9	283	283
34	167	3	1.80	1.26	3	11	10	69	157	9	5.73	6.01	9	292	292
35	179	2	1.12	1.29	3	13	12	70	139	9	6.47	6.50	9	301	301
36	193	2	1.04	1.32	3	15	15	71	113	5		7.05	8	306	309
37	208	2	.96	1.35	3	17	18	72	89	12		7.66	7	318	316
38	233	5	2.14	1.39	3	22	21	73	61	7		8.33	5	325	321
39	247	1	.40	1.43	4	23	25	74	50	1		8.93	4	326	325
40	266	5	1.88	1.47	4	28	29	75	37	2		9.58	4	328	329
41	298	2	1.03	1.52	4	31	33	76	33	5		10.26	3	333	332
42	320	5	1.56	1.57	5	36	38	77	25	1		10.96	3	334	336
43	375	9	2.41	1.63	6	45	44	78	22	5		11.68	3	339	338
44	428	10	2.28	1.71	7	55	51	79	16	1		12.42	2	340	340
45	478	10	2.09	1.77	8	65	69	80	14	1		13.18	2	341	342
46	518	13	2.50	1.86	10	78	69	81	10	3		13.98	1	344	343
47	551	10	1.81	1.94	11	88	90	82	5	1		14.07	1	345	344
48	519	9	1.73	1.94	11	97	91	83	4	1		15.09	.6	346	344
49	486	4	.82	2.13	10	101	101	84	3	0		15.88	.5	346	345
50	467	8	1.71	2.23	10	109	111	85	1	0		17.63	.2	346	346
51	463	8	1.72	2.34	11	117	122	86	1	0		19.28	.2	346	346
52	437	9	1.96	2.46	11	126	133	87	1	0		21.02	.2	346	346
53	396	11	1.78	2.58	10	137	143								

Having now detailed the process of arranging the data,* and obtaining therefrom the rate of mortality at every age, it becomes necessary to describe the method which has been adopted in adjusting the irregularities of the same, in order to obtain a law of mortality applicable to practical purposes. Column D of the preceding table shews the mortality per cent. at every age, deduced from columns B and C, and exhibits conspicuously the irregularities of the unadjusted table of the observations. But to render these still more apparent, it was drawn on a diagram of curves, the zigzag line shewing the rate of mortality which actually obtained at every age; the ages being arranged down the left of the diagram, and the mortality per cent. in numbers along the top, shewing the comparative lengths of the ordinates of the curves measured from the left of the diagram at each age.†

Through this line was drawn the continuous curve bisecting the irregularities of the first, *including* and *excluding* equal spaces on either side. The ages on the side, and the numbers along the top, apply equally to this and to all the other curves on the same board; and the adjusted mortality per cent. in column E of the table corresponds with that shewn by this curve.

To ascertain whether I had taken any unjustifiable liberty with the original observations in this adjustment, I made the calculations represented in column F, which shews the number of deaths to be expected from the actual number living at each year of age. And then the actual deaths in C and calculated deaths in F were added from the beginning of the table to each year of age, and the results are shewn in columns G and H.

By casting the eye down these columns it will at once appear that the number of actual and of calculated deaths correspond so repeatedly throughout the period, as well as at its conclusion, as to leave no doubt of the correctness of the adjustment.

The accuracy of the adjustment being thus established, there is no difficulty in forming from it, in the usual manner, a table of the law of mortality.

Before concluding, I would solicit attention to a brief comparison of the rate of mortality of officers retired from the Indian army with other classes of persons residing in this country; and for this purpose I have prepared the following table of comparative rates, shewing in column

A,	the mortality per cent. according to	Mr. Milne's Carlisle experience.
B,	"	Mr. A. Morgan's Equitable experience.
C,	"	Experience of Retired Officers.
D,	"	Dr. Price's Northampton experience.

Curves corresponding with these rates were also drawn on the diagram.

* The original papers were laid upon the table at the meeting, and the author will be happy to shew them to any Fellow of the Society desirous of inspecting them, at the office of the Universal Life Assurance Society, No. 1, King William Street, City.

† This diagram was exhibited to the meeting, and may still be seen at the rooms of the Statistical Society.

A Comparative Table of the Rates of Mortality per Cent., from the Ages of 20 to 80, according to the

Age.	Carlisle Experience, by Mr. Milne.	Equitable Experience, by Mr. A. Morgan.	Experience of Retired Officers, by Mr. R. Christie.	Northampton Experience, by Dr. Price.	Age.	Carlisle Experience, by Mr. Milne.	Equitable Experience, by Mr. A. Morgan.	Experience of Retired Officers, by Mr. R. Christie.	Northampton Experience, by Dr. Price.
A.	B.	C.	D.		A.	B.	C.	D.	
20	·71	·73	1·05	1·40	51	1·43	1·61	2·34	2·95
21	·69	·72	1·06	1·48	52	1·52	1·72	2·46	3·04
22	·70	·72	1·07	1·50	53	1·62	1·88	2·58	3·14
23	·70	·73	1·08	1·53	54	1·69	1·98	2·72	3·24
24	·71	·73	1·09	1·55	55	1·79	2·08	2·86	3·35
25	·73	·76	1·10	1·58	56	1·90	2·25	3·00	3·47
26	·74	·76	1·11	1·60	57	2·09	2·47	3·15	3·59
27	·77	·77	1·12	1·63	58	2·42	2·67	3·31	3·72
28	·87	·78	1·13	1·65	59	2·83	2·92	3·48	3·87
29	·98	·78	1·15	1·68	60	3·33	3·15	3·66	4·02
30	1·01	·81	1·17	1·71	61	3·58	3·32	3·84	4·19
31	1·02	·82	1·19	1·74	62	3·74	3·48	4·04	4·32
32	1·01	·85	1·21	1·78	63	3·83	3·68	4·25	4·52
33	1·00	·88	1·23	1·80	64	3·98	3·90	4·47	4·67
34	1·01	·91	1·26	1·84	65	4·11	4·28	4·72	4·90
35	1·02	·92	1·29	1·87	66	4·25	4·70	4·99	5·15
36	1·06	·95	1·32	1·91	67	4·44	5·07	5·21	5·43
37	1·09	·99	1·35	1·94	68	4·64	5·48	5·58	5·75
38	1·11	1·05	1·39	1·98	69	4·91	6·00	6·01	6·09
39	1·19	1·08	1·43	2·02	70	5·16	6·39	6·50	6·49
40	1·30	1·10	1·47	2·09	71	5·89	6·82	7·05	6·94
41	1·38	1·13	1·52	2·16	72	6·81	7·32	7·66	7·46
42	1·41	1·15	1·57	2·24	73	7·81	7·90	8·33	8·06
43	1·46	1·16	1·63	2·29	74	9·02	8·53	8·92	8·77
44	1·48	1·20	1·71	2·35	75	9·55	9·30	9·58	9·61
45	1·48	1·27	1·77	2·40	76	10·30	9·81	10·26	10·24
46	1·48	1·28	1·86	2·46	77	10·74	10·48	10·96	10·81
47	1·46	1·33	1·94	2·52	78	10·88	11·26	11·68	11·30
48	1·39	1·38	2·04	2·59	79	11·84	12·06	12·42	12·17
49	1·37	1·42	2·13	2·69	80	12·17	13·29	13·18	13·43
50	1·34	1·49	2·23	2·84					

On this subject it will be useful to refer again to the diagram of curves; from the inspection of which it is manifest that though the lives of gentlemen retiring from an Indian residence are inferior to the selected lives of the Equitable Assurance Society, or those indicated by the Carlisle table, they are far superior to the lives indicated by the Northampton table.

It cannot be otherwise than highly gratifying to the numerous persons connected, directly or indirectly, with Indian residents, to know that the constitutions of persons returning from a residence in that climate have not sustained that extent of damage which has been generally supposed; but that, on the contrary, on returning to their native country, they take their station amongst its healthiest inhabitants. It is not our purpose, on the present occasion, to investigate the rate of mortality prevailing amongst military officers while serving in India; but it may be mentioned, by way of illustration, that, at the age of 40, for example, the rate of mortality among officers serving in India is 3·86 per cent.; whereas, according to the foregoing tables, the rate of mortality of officers of the same age after retirement is only 1·47 per cent. From these

facts, it appears that the retired officers constitute, as regards health, a selected class, consisting of men whose constitutions have been originally stronger than those of their brethren, and who have survived the effects of the Indian climate during the usual period of service there, or of men whose prudence may have so regulated their habits as to diminish the injurious effects of the climate, or pointed out to them the propriety of leaving it before their health had sustained irreparable injury.

Fires in London, with an Account of the London Fire-Engine Establishment.

THE formation of the "London Fire-Engine Establishment," which took place in the year 1832, has afforded an opportunity for collecting accurate information with respect to the number, causes, and extent of fires in the metropolis and its vicinity. It is surprising that, notwithstanding the obvious advantages of combination and unity of action on occasions when the lives and fortunes of thousands are often exposed to the most imminent risk, and with the successful example of the "Corps des Sapeurs Pompiers" in France, the insurance offices should so long have maintained the old and expensive system of separate engine establishments. So far back as the year 1808, Sir Frederick Morton Eden, then chairman of the Globe Insurance Office, entered into communication with the several offices for the purpose of inducing them to co-operate in the formation of a general fire-engine establishment. His proposition was, that each office joining the association should depute one or two members to form an engine committee, who should have control over the direction and expenditure of the establishment, but that no engine-houses or stables should be purchased or built without the concurrence of all the offices interested. Each office was, at the outset, to furnish a gang of 20 firemen, of whom 10 were to be first-class men, who should receive allowances for all fires they attended, and 10 second-class men, who were to be paid only when specially authorised to attend; and all future appointments and other matters respecting the firemen were to be managed by the engine committee. Each office was to pay an equal contribution towards the expenses of the establishment. This attempt, however, failed; for in December of that year Sir F. Eden writes, that "he had ascertained that it was in vain to expect co-operation from any other insurance office, except the Atlas, in the formation of a joint engine establishment, and that the Globe office had consequently abandoned the endeavour to effect it."

About the year 1825 three offices, the Sun, Union, and Royal Exchange, formed a union—the whole of their engines and men being placed under the charge of a superintendent, who took the command when the former were called out, and who checked the pay-bills. The Atlas and Phoenix subsequently joined the brigade.

It was not, however, until the year 1838 that this union extended itself to the principal remaining offices. Previous to 1831 considerable changes had taken place among the insurance offices: several of them had altogether declined fire insurance, and others had greatly reduced their engine establishments. It is stated that the number of fire-engines belonging to the different London companies in that year was

88, whereas four or five years previously it had amounted to 50. The number of firemen protected from impressment by the provisions of the Building Act amounted, in 1815, to 398. About the year 1831 some of the insurance companies proposed to form a general alliance, for mutually assisting each other at fires, with a view to the reduction of their separate expenses, which such a step would render practicable; and in the course of the following year the "London Fire-Engine Establishment" was formed, by the union of the following 10 insurance companies: the Alliance, Atlas, Globe, Imperial, London Assurance, Protector, Royal Exchange, Sun, Union, and Westminster. It commenced operations on the 1st January, 1833. The remaining seven insurance offices withheld their co-operation at the commencement, but, of these, five, having found the experiment successful, have since joined the brigade, viz., the British, Guardian, Hand-in-Hand, Norwich Union, and Phoenix. The two which remain separate are the County and the West of England. Of the new offices established since 1833, the Protestant Dissenters', Licensed Victuallers', and the York and London, have joined the brigade; the "South London and Independent West Middlesex" remains separate.

The affairs of the establishment are managed by a committee, consisting of a director or secretary from each of the associated insurance companies, which subscribe towards its support in certain agreed proportions.

The metropolis has been divided into the following five districts:—

North side of the river—

1st. From the eastward to Paul's Chain, St. Paul's Churchyard, Aldersgate-street, and Goswell-street-road.

2nd. From St. Paul's, &c., to Tottenham-court-road, Crown-street, and St. Martin's-lane.

3rd. From Tottenham-court-road, &c., westward.

South side of the river—

4th. From the eastward to Southwark-bridge-road.

5th. From Southwark-bridge-road westward.

The force consists of 96 men in permanent employment, consisting of 5 foremen, 10 engineers, 9 sub-engineers, 31 senior firemen, 35 junior firemen, and 6 extra men, under the direction of a superintendent. The number of engines is 33, and the following is a list of the stations at which they are kept, with the number of men at each:—

	No. of Engines.	No. of Men.
Watling-street (the principal station)	3	11
Wellclose-square	3	9
Farringdon-street	3	8
Chandos-street, Covent-garden	3	8
School-house-lane, Ratcliffe	1	2
Horseferry-road, Westminster	1	1
Pedlar's-acre, Lambeth (about to be removed to the station in the Waterloo-road)	1	1
Paradise-row, Rotherhithe	1	2
Jeffrey-square, St. Mary Axe	2	7
Whitecross-street	1	5
High Holborn, No. 254	2	5
Crown-street, Soho	2	5
Carried forward	23	64

Brought forward	23	64
Wells-street, Oxford-street	1	5
Baker-street, Portman-square	1	4
King-street, Golden-square	2	6
Waterloo-road	1	5
Southwark-bridge-road	2	7
Morgan's-lane, Tooley-street	1	5
Floating engine, off King's-stairs, Rotherhithe.	1	..
„ off Southwark-bridge	1	..
	<hr/> 33	<hr/> 96

The first four are double stations; the next four are stations of extra engines, which will account for the small number of men attached to them.

There are generally 1 engineer, 2 senior and 3 junior firemen, attached to each station. One-third of the men are constantly on duty at the different engine-houses, night and day; and the whole are liable to be called up for attendance at fires or for any other duty. In general the attendance is arranged as follows:—

If a fire happen in the 1st district, the whole of the men and engines of that district immediately repair to the spot, with two-thirds of the men and one of the engines from each of the 2nd and 4th districts, and one-third of the men from the 3rd and 5th districts.

If the fire happen in the 2nd district, the whole of the men and engines belonging to it repair to the fire, with one engine and two-thirds of the men from each of the 1st and 3rd districts, and one-third of the men from the 4th and 5th.

If the fire happen in the 3rd district, the whole of the men and engines belonging to it, with one engine and two-thirds of the men from each of the 2nd and 5th districts, and one-third of the men from the two remaining districts, attend the fire.

If the fire is in the 4th district, all the men and engines belonging to the district attend it, with one engine and two-thirds of the men from each of the 1st and 5th districts, and one-third of the men from the remaining districts.

If the fire happen in the 5th district, all the men and engines belonging to it, with one engine and two-thirds of the men from the 3rd and 4th districts, and one-third of the men from the remaining districts, attend.

If a fire happen on the boundary of a district, and it is doubtful in which district it has occurred, the whole of the engines and men of the two adjoining districts, and one-third of the men of the three remaining districts, proceed instantly to the spot.

The superintendent, upon an alarm of fire, immediately repairs to the spot, wherever it may be, and takes the command of the whole force. In his absence the senior fireman or engineer takes the command.

It is unnecessary to enlarge upon the advantages which such an united and well-organised system of action possesses over the former separate establishments, acting not only with independence, but with jealous rivalry of each other.

The superintendent has power to call in such additional force as he may require, and all the foremen and engineers have funds placed at

their disposal for remunerating persons who give an early alarm or whom they may employ, as well as those who assist to work the engines.

The men are clothed in a dark grey uniform, trimmed with red, with the number of each man marked in red on the left breast; they have black leather waist-belts, and hardened leathern helmets. The engines are upon the best construction, and are all provided with the following useful articles, adapted not merely to the suppression of fire, but to the saving of human life and the rescue of property;—several lengths of scaling ladder, each $6\frac{1}{2}$ feet long, all of which may be readily connected, forming in a short space of time a ladder of any required height; a canvas sheet, with 10 or 12 handles of rope round the edge of it for the purpose of a fire-escape; one 10-fathom and one 14-fathom piece of $2\frac{1}{2}$ -inch rope; six lengths of hose, each 40 feet long; two branch-pipes, one $2\frac{1}{2}$ feet and the other from 4 to 6 feet long, with one spare nose-pipe; two 6-foot lengths of suction-pipe, a flat rose, standing-cock, goose-neck, dam-board, boat-hook, saw, shovel, mattock, pole-axe, screw-wrench, crow-bar, portable cistern, two dog-tails, two balls of strips of sheep-skin, two balls of small cord, instruments for opening the fire-plugs, and keys for turning the stop-cocks of the water-mains.

The men receive the following wages: a junior fireman, 21s. a week; a senior fireman, 24s. 6d.; a sub-engineer, 26s.; and an engineer, or foreman, 28s. The foreman of a district receives, in addition, 1s. a week for each engine in his district.

A registry of all the fires is kept, from which, and from the papers of Mr. Baddeley, in the "*Mechanics' Magazine*," the facts upon which the following statements are founded have been taken, commencing at the year 1833, when the establishment first came into operation.

The total number of alarms of fires which have been attended by engines of this establishment, during the five years from 1833 to 1837, was 3959, or, on an average, 672 in each year, exclusive of fires in chimneys, known at the time to be such, which amount to a very large number, and are often attended with considerable danger.* But of this number, 343, or 68 in each year, were false alarms, and 540, or 108 in each year, proved to be alarms from fires arising in chimneys; there remain, therefore, 2476, or 495 in each year, which may be represented as fires, yielding an average of 41 fires a month, and, if chimneys on fire be included, an average of 50 a-month.

Thus, then, the number of alarms of fires attended by the London Fire Establishment averages 13 a week, or not quite 2 daily; and the number of actual fires averages $9\frac{1}{2}$ weekly, or 4 in three days.

With respect to the false alarms, many have arisen from a laudable anxiety to prevent mischief; but several have been given without the slightest foundation, and from motives of sheer mischief, by persons who were shamefully regardless of the inconvenience and expense thus caused to the establishment and its servants, and of the protection of which the public is deprived by the engines being absent from their

* In 1836 the number of calls to chimneys on fire was 1530, and of false alarms, 623; but, as in some cases two engines from one station may have attended the same call, the number of chimneys may be stated at 100 per month, and of false alarms at 50 per month.

accustomed stations on distant useless errands. But another and remarkable cause to swell the number of false alarms has been rather frequent of late, namely, atmospheric phenomena, among which is the *aurora borealis*, popularly called the "northern lights." On one occasion, in November 1835, 12 engines and 74 men were kept in constant motion from 11 P.M. of the 17th, to 6 A.M. of the 18th, in pursuing a number of false alarms, caused by these appearances. Some of the engines reached Hampstead, and others Kilburn, before the mistake was discovered. On another occasion, in 1836, the rays of the rising sun at half-past 4 in the morning occasioned a glare of light in the sky to the east, which attracted a considerable number of engines, driven at conjecture—some along Ratchliffe-highway, some down the Commercial-road, while others went to Mile-end. On reaching these points, however, the appearances became gradually fainter; but the firemen came in sight of a second light, more to the south, which really proved to be a fire. On the 18th of October, in the same year, a most extraordinary appearance of the *aurora borealis* occurred, which served to deceive the oldest firemen: a crimson glare of light arose in the horizon to the north-east, about half-past 8 o'clock, P.M., which seemed to be caused by a fierce conflagration; and the resemblance was increased by what appeared to be clouds of smoke rising up after the glare, and breaking and rolling away beneath it. Thirteen engines and a large body of men went in search of the supposed fire; and crowds of people and carriages kept pouring from the west-end to witness it. The alarm upon this occasion was not confined to London: at Dublin, Leyden, Utrecht, Strasburg, Troyes, Rennes, and Nantes, the same alarm was created, and was attended with a similar turn-out of the firemen, military, &c.

Of the 2476 fires, the premises were—

Wholly consumed in	145	instances, or	5·8	per cent. of the whole number.
Seriously damaged in	632	,,	25·6	,,
Slightly damaged in	1699	,,	68·6	,,

100·

But it must not be supposed that the houses in the first class, which consists of those buildings in which the fire originated, and which were totally destroyed, were those in which the greatest amount of damage was sustained. If, therefore, the two first classes be added together, it will appear that, of the actual fires which occur, nearly one-third, or 31·4 per cent., commit serious damage.

It is of importance to examine why, in the instances of buildings totally destroyed, the efforts of the firemen have been unsuccessful in repressing the fire before it has attained to such a height. The following is an analysis of the 145 instances in this class. 30 occurred at such a distance from the nearest station as to preclude the possibility of timely assistance being rendered by the London firemen. It is necessary to observe that there are no limits of distance within which this establishment confines itself. If a fire appears in the horizon, or if information is furnished of a distant fire, the appointed engines start in the direction with post-horses, notice being sent forward to prepare relays; and in this manner it frequently happens that the London engines arrive at the spot before the engines of the neighbouring pa-

ishes. Among the distant places at which these engines have attended, are Brentford, Barnes, Richmond, Putney, Bromley, Croydon, Barnet, Uxbridge, Finchley, Woodford-bridge, and Cranford-bridge, which is 15 miles from town. In 20 instances, the total destruction of the premises has been solely attributable to the late and scanty supply of water which was obtained. This is a serious evil, which calls loudly for remedy; indeed, considerable improvement in this respect has taken place during the last 5 years in parts of the metropolis, particularly in Southwark: in 1837 no premises were totally destroyed through the want of water, and the supply is stated to have been generally good, although in some instances considerable delay has occurred in procuring it. 44 fires occurred in buildings filled with oil, tar, turpentine, and other highly inflammable substances, or in carpenters', cabinet-makers', coach-makers', and other shops, which are so highly combustible, that it is next to impossible to extinguish a fire when it has once spread, and the firemen have no chance left of doing more than preserving the adjoining buildings. In 26 instances the premises were so small as to be nearly destroyed before an alarm could be given at the nearest stations. In 7 instances the buildings were very old, chiefly built of wood, and offering great facilities for the spread of fire; and in 4 the buildings fell down from age before the fire had made much progress. In the remaining 14 instances, the buildings in which the fire originated were so completely on fire before an alarm was given, that it was found impossible to save them from destruction. These fires also were mostly in the outskirts of the metropolis, and in several instances occurred in very small buildings.

The following is a tabular view of the preceding causes of total destruction—

	No. of Instances.	
Distance from London	30	= 20·7 per cent.
Insufficient or tardy supply of water	20	= 13·8 „
Combustible nature of buildings	44	= 30·3 „
Small size of ditto	26	= 17·9 „
Excessive age of ditto	11	= 7·6 „
Extent of fire before arrival of engine	14	= 9·7 „
	145	= 100· „

It may here be mentioned, that the number of buildings destroyed in the 145 fires belonging to this class was 182, or, on an average, $1\frac{1}{2}$ to each fire. In 13 instances 2 buildings were destroyed by a single fire; in 4 instances, 3; in 6 instances, 4; in 2 instances, 5; and in 1 instance, 8.

From an examination of the returns for each year, to which we will now proceed, it appears that the total number of alarms has considerably increased within the period under review. In 1833 the total number was 592, and in 1837, 717, an increase of 21 per cent.; but it will be observed that this arises principally from the great increase in the number of false alarms and chimneys on fire, and that the increase of real fires is only from 458 to 501, or 9 per cent., while the increase of false alarms is 50 per cent., and that of chimneys on fire is 69 per cent.

Number of fires occurring in each year—

Years.	Fires.	Chimneys on Fire.	Alarms.	Total.
1833 . .	458	75	59	592
1834 . .	492	106	63	651
1835 . .	471	106	66	643
1836 . .	564	126	66	756
1837 . .	501	127	89	717
Total .	2476	540	343	3359
Average	495	108	68	672

Increase between } 9 per cent. 69 per cent. 50 per cent. 21 per cent.
1833 and 1837 }

The year 1836 presents an unusual number of fires, and it is stated that a great increase occurred in the same year in all parts of the United Kingdom.

The preceding Table exhibits a gratifying fact, that while the number of fires has increased in a comparatively small ratio, probably not out of proportion to the great increase of buildings which have been erected during the last five years, the activity of the London Fire Establishment has been instrumental in extinguishing a much larger number of chimneys on fire; and that the effects of speedy attendance, proper organization, and enlarged experience, are already visible in the increased security of the inhabitants of the metropolis.

This fact is shown in a still stronger light by the following statement of the number of houses totally destroyed or seriously damaged, in comparison with the number slightly damaged, in each year:—

Years.	Wholly Consumed.	Average.	Seriously Damaged.	Average.	Slightly Damaged.	Average.
1833 . .	31	31	135	127	292	335
1834 . .	28		116		338	
1835 . .	31		125		315	
1836 . .	33		134		397	
1837 . .	22		122		357	
Total .	145		632		1699	
Average . . .	29		126		339	

From this account it appears that the number of serious fires was considerably less in 1837 than the average of the preceding years.

The number of fatal fires, in which the lives of individuals have been lost, have greatly increased; but as these cases generally arise from delay in giving an alarm, the Fire Brigade is in no way responsible for them.

Years.	Number of Fatal Fires.	Number of Lives lost.
1833 . .	5	12
1834 . .	5	7
1835 . .	7	11
1836 . .	14	14
1837 . .	16	13
Total .	47	57

Of the 11 deaths which occurred in 1835, it is expressly stated that only 2 could have been saved by any human effort; in the other cases life was extinct before an alarm was raised. Of the 14 cases in 1836, 8 were females, whose wearing apparel had caught fire, and who

received such serious injury as to cause death; and of the total number in 1837, 9 arose from the same cause, 5 being adults and 4 children.

The next point to be considered is the seasons at which fires occur, with the view of discovering any circumstances which will develop more clearly the causes of these disasters, and lead to their prevention. With respect to the seasons of the year, the following Table will show that the winter months do not exhibit so large a preponderance of fires as might be expected. It is true that December presents not only the largest number, on the average of the five years, but that in each year, with one exception, the number which occurred in that month exceeded the average of the year: but the month next in order is May, and then follow March and July, which are within one of each other; indeed, so little variation does the season of the year, as regards heat and cold, make, that the number of fires in the months between May and October slightly exceeds that in the months from November to April, being 1241 in the former period, and 1235 in the latter.

A Statement of the Number of Fires in each Month of the five Years from 1833 to 1837.

MONTHS.	YEARS.					Total.	Average.
	1833	1834	1835	1836	1837		
January . . .	47	32	38	56	34	207	41
February . . .	29	40	40	41	39	189	38
March . . .	43	37	36	46	58	220	44
April . . .	29	27	45	43	31	175	35
May . . .	48	37	35	57	48	225	45
June . . .	42	37	37	39	44	199	40
July . . .	36	44	37	55	47	219	44
August . . .	39	49	48	35	42	214	43
September . . .	39	40	35	43	39	196	39
October . . .	30	40	33	44	41	188	38
November . . .	35	56	36	47	37	211	42
December . . .	41	43	61	58	40	233	47
Total . . .	468	482	471	564	501	2476	496
Average . . .	38	40	39	47	42	41	..

On comparing the number of fires occurring on each day of the week, it appears that there is a slight excess on Friday, but not to such an extent as to furnish ground for any inference. There is, however, a decided falling off on Saturday, which occurs in each separate year; there is, therefore, reason for asserting the existence of some cause which occasions a smaller number of fires on that day than on any other day in the week. Sunday presents no exemption, which is consistent with the fact, that while on that day there are less fires in use for manufacturing or other processes, the danger of fires in private dwellings is greatly increased by the customary absence of a large portion of the middling and lower classes from their houses on that day, without any person being left at home to guard the premises. It is a fact, that a large number of fires occur in small and humble private buildings on

the Sabbath evening, as well as in manufactories, in which the usual fires are necessarily maintained during that day, but which are usually left without proper attendance. Hence some of the most extensive conflagrations in these manufactories and warehouses occur on Sunday evening or Monday morning, the fire having smouldered unseen during the whole of the Sabbath.

Number of fires which occurred on each day of the week, during the 4 years from 1834 to 1837 :—

Days of the Week.	Total.	Average.
Monday	278	69
Tuesday	291	73
Wednesday	289	72
Thursday	299	75
Friday	304	76
Saturday	259	65
Sunday	398	74
Total	1975	494
Average . . . . .	..	70

It will be interesting to examine the hours at which fires chiefly occur, and the following table will exhibit that fact very clearly. It appears that the number of fires is at the minimum from 5 till 9 o'clock in the morning, when it begins slightly to increase until 5 in the afternoon; at which hour the rate of increase becomes considerable, and continues until 10 and 11 o'clock, when the number is at the maximum; from which time it gradually declines until the dawn. Nearly one-half of the total number, or 48 per cent., occur between the hours of 7 in the evening and 1 in the morning; and nearly three-fifths, or 57 per cent., between 6 and 2. The steadiness of the rate, both of increase and decrease, is worthy of notice.

Number of fires which occurred at each hour, during the 5 years from 1833 to 1837 :—

Hours.	Total No. of Fires.	Per-Centage Proportion.	Hours.	Total No. of Fires.	Per-Centage Proportion.
A. M. 5	50	2.02	P. M. 5	98	3.96
6	61	2.46	6	115	4.64
7	47	1.90	7	123	4.93
8	51	2.06	8	182	7.35
9	50	2.02	9	189	7.63
10	61	2.46	10	199	8.04
11	70	2.83	11	197	7.96
12	82	3.31	12	165	6.64
P. M. 1	77	3.11	A. M. 1	129	5.21
2	80	3.23	2	113	4.56
3	87	3.51	3	80	3.23
4	84	3.39	4	83	3.55

The following statements exhibit the number of fires which have occurred within and without the city walls during the 5 years from 1833 to 1837. In the second number of this Journal it was stated, in an article upon the Metropolitan Police, that the number of fires observed and reported by that force amounted to 240 in 1836, and to 229 in 1837; but it appears that the number attended by the London Fire Establishment was just double that amount in both years, exclusive of fires in the city, which are not taken into account by the Metro-

politan Police. Some portion of this difference may arise from the circumstance of the Engine Brigade attending fires beyond the jurisdiction of the police; but this will scarcely explain so great a discrepancy.

The average annual number of fires within the city was 71; of burning chimneys, supposed to be fires, 10; and of false alarms 8: without the city, the average annual number of fires was 422, or 6 to 1, as compared with the city; the average annual number of chimneys on fire was 100; and of false alarms 58. It is a remarkable fact, that the proportion of houses totally destroyed within the city, which might be supposed to be very great, on account of the usually crowded position, the aged condition, and defective construction of the buildings, is, on the contrary, very small. Out of the 145 instances of premises totally destroyed, only 7 were situated in the city; which, in proportion to the total number of fires, gives 1 case of total destruction to 51 fires within the city, and 1 case in 15 fires without the city. The number of fatal fires within the city is equally small: out of the 57 lives lost by fire in the 5 years, 4 only were lost in the city, being 1 in 89 fires, whereas, without the city, the number was 1 in 40 fires. Two causes probably combine to produce this striking difference; first, the crowded state of the buildings in the city, which tends to the immediate discovery of a fire before it has acquired much force; and secondly, the greater proximity of the engine stations, which affords the means of communicating the alarm more rapidly to the firemen.

	Number in 5 Years.	Within the City.	Average.	Without the City.	Average.
Fires	356	71	2111	422	
Chimneys, supposed to be fires	50	10	500	100	
False Alarms	41	8	292	58	
Fatal Fires—Number	7	1.4	138	27	

The next important branch of the enquiry relates to the nature of the premises in which fires have occurred, and the occupations of their inhabitants, which will afford the means of estimating the comparative liability to fire of any particular trade. The subjoined list contains this information, care having been taken to distinguish between the fires which have originated in that portion of the building appropriated to trade or manufacture, from those which have happened only in the dwelling parts; the latter being classed among the private houses:—

A List of the Occupations of Premises in which more than 6 Fires have occurred during the Five Years from 1833 to 1837.

Apothecaries	7	Brought forward	305
Bagnios	9	Churches	10
Bakers	71	Coach-makers	14
Beer Shops	8	Coffee-Roasters	7
Booksellers, Binders, and Stationers	27	Coffee-shops and Chop-houses	16
Brokers and Dealers in Old Clothes	24	Colour-makers	6
Cabinet-makers	32	Distillers (including illicit)	13
Carpenters	92	Drapers and Mercers	20
Chandlers	14	Dyers	6
Cheesemongers	7	Eating-houses	18
Chemists	14	Farming Stock	16
		Feather Merchants and Dressers	7
		Firework-makers	9
Carried forward	305	Carried forward	447

Brought forward	447	Brought forward	1780
Foundries	12	Rag Merchants	7
Gas-Works	13	Sale Shops and Offices	174
Grocers	23	Ships (including Steam Vessels)	21
Haberdashers, &c.	9	Stables	41
Hat-makers	25	Tailors	12
Hotels	10	Tallow-Chandlers	18
Houses { Private	909	Tinmen, Braziers, &c.	28
Under Repair	23	Victuallers	156
Unoccupied	26	Warehouses	26
Lamp-Black-makers	8	Wine and Spirit Merchants	21
Lodging-Houses	169	Workhouses	10
Lucifer Match-makers	14		2284
Marine Stores (Dealers in)	8	Total of Trades in each of	
Oil and Colourmen	41	which less than 6 fires oc-	192
Painters, Plumbers, and Glasiers	7	curred	
Printers	12		2476
Public Places and Theatres	14		
Carried forward	1780		

From this statement, it appears that the number of private and lodging-houses amounts to 1125, or 45 per cent. of the total number. Next in frequency stand sale-shops or offices, which belong to no particular trade; the number of these is 174. Among the trades, victuallers have an unenviable pre-eminence; the number of fires in this class of houses amounts to 156. Many of these have originated in the highly-improper practice of entering vaults and cellars with candles, or other exposed lights, from which sparks drop among the straw with which such places abound, and cause immediate ignition. Next in order stand the carpenters, then the bakers, oil and colourmen, stables, cabinet-makers, tinmen and braziers, &c., booksellers, binders, and stationers, warehouses, hat-makers, brokers and dealers in old clothes, grocers, ships, wine and spirit sellers, drapers and mercers. In the remaining trades, for which the reader may refer to the list, the number of fires amounted on an average to less than 4 in each year.

We will only call attention to the large number which took place on the premises of Lucifer-match-makers, which considerably exceeds that among firework-makers, and which have now become so frequent as to form a class among the causes of fires, which we now proceed to describe.

Every endeavour is used by the firemen to ascertain the causes of fires, and it will be seen from the following statement, that in a large proportion of cases they have been successful. Indeed, from the great promptitude with which attendance is now given, the proportion of cases in which the cause was undiscovered during the last year is very small. A perusal of this table is calculated to convey a useful lesson; for it is evident that a large proportion of the fires arise from carelessness, and that a very moderate share of attention would suffice very materially to reduce the number of these disastrous occurrences.

A Statement of the Causes which have led to Fires, as far as the same could be ascertained, in each year from 1833 to 1837.

CAUSES.	1833	1834	1835	1836	1837	Total.
Accidents of various kinds, ascertained to be for the most part unavoidable	83	40	14	11	17	165
Apparel ignited on the person . . . . .	..	..	..	7	7	14
Candles, setting fire to bed-curtains . . . . .	..	115	52	71	47	368
,, ,, window-curtains . . . . .	..	..	29	35	29	
,, ,, various accidents with	56	34	36	51	49	226
Carelessness, palpable instances of	28	..	19	18	7	72
Children playing with fire . . . . .	..	..	5	6	18	29
Fires, sparks from . . . . .	..	..	..	7	10	17
,, kindled on hearths or other improper places	7	..	9	5	5	26
,, portable charcoal . . . . .	..	..	..	2	..	2
Fire-heat applied to various trades & manufactures	31	15	39	34	22	141
Fliteworks . . . . .	..	..	3	..	5	8
Flues—stopped up, defective, or ignited	71	65	69	72	53	330
Fumigation, incautious . . . . .	..	3	7	4	2	17
Furnaces overheated, &c. . . . .	..	11	2	9	12	34
Gas, sundry accidents from escape of	20	25	39	38	25	153
,, accidents in lighting of					6	
Gunpowder	8	3	..	1	3	10
Intoxication . . . . .	..	2	3	..	2	7
Lamps, sparks from . . . . .	..	..	..	2	3	5
Linen, drying or airing before fires . . . . .	..	..	22	31	48	101
Lucifer-Match-making . . . . .	..	..	..	..	8	8
Ovens—overheated, defective, &c.	6	..	..	6	3	15
Shavings—loose, ignited . . . . .	..	6	9	13	8	36
Spontaneous combustion of coals	1	..	..	..	..	1
,, ,, hay and straw	3	1	3	1	..	8
,, ,, lamp-black . . . . .	..	..	1	..	..	1
,, ,, lime . . . . .	..	3	4	3	..	10
,, ,, rags	8	..	1	1	3	8
,, ,, soot . . . . .	..	..	..	2	..	2
,, ,, tan . . . . .	..	1	..	..	1	2
Stoves & Stove-pipes—defective, overheated, &c.	18	20	11	28	28	105
Stoves, drying . . . . .	..	..	..	..	8	8
Suspicious . . . . .	..	..	..	..	7	7
Tobacco—smoking . . . . .	..	6	4	1	3	14
Wilful	3	9	6	8	5	31
Total Discovered	833	868	880	468	444	1993
,, Undiscovered	125	114	91	96	57	483
Total number of Fires	458	482	471	564	501	2476

From the above it will appear, that during these five years the causes which have led to fires have been ascertained in 80 out of 100 cases, but that in 1837 the proportion was 89 per cent. The number of accidents not distinguished has also decreased from 83 to 17 during the five years. These two facts combine to show an increase of alacrity and skill on the part of the firemen, and have afforded the means of giving a more minute description of the causes of fire than was practicable at the commencement of the period.

It will be observed that accidents from candles form by far the largest class in the above Table, amounting to within a fraction of 30 per cent., or 3 in 10, of the whole number of fires the causes of which were discovered. In the three last years a distinction is made between accidents arising from the ignition of bed-curtains and that of window

curtains, from which it appears that of the total number of fires occasioned by candles, 43 per cent. arose from the setting on fire of bed-curtains, 22 per cent. from the setting on fire of window-curtains, and 35 per cent. from various other accidents. The defective construction and imperfect cleansing of flues, chimneys, and stoves, prove the next most fruitful source of damage; they amount to 22 per cent. of the whole number, the proportion of flues to stoves being as 3 to 1. The number of accidents from gas amounts to $7\frac{1}{2}$ per cent., or 1 in 13, and those from fire-heat, applied to various trades and manufactures, to 7 per cent., or 1 in 14 fires. It is only within the last three years that the number of accidents arising from linen being hung before the fire to dry or air has been distinguished: this appears to be a very frequent cause of fire; it amounts to nearly 8 per cent. of the fires whose causes were discovered in those years, or 1 in every 13 fires. The number of wilful fires in the five years was 31, or, on an average, 6 in each year; compared with the total number of fires whose causes were discovered, they were as 1 in 64. The number of fires from palpable instances of carelessness is considerable, and this class would probably be much increased if the origin of all the fires could be ascertained. There is no other large class of causes: but the following are worthy of notice:—apparel ignited on the person; children playing with fire; incautious fumigation; intoxication; lucifer-match-making; loose shavings ignited; spontaneous combustion of various substances, and tobacco smoking.

The next Table will show the causes of fires in the different classes of buildings or trades before noticed, as furnishing the largest number of fires, which will, in some measure, afford the means of discovering the circumstances that have a particular tendency in each trade to cause these disasters.

An Account of the Causes, as far as the same can be ascertained, which led to Fires in those Classes of Buildings in which more than 20 Fires occurred during the Five Years from 1833 to 1837.

CLASSES.	Curtains.	Candles.	Trade.	Flues.	Stoves.	Children.	Incautious Fumigation.	Gas.	Tobacco Smoking.	Steam.	Spontaneous Combustion.	Other Causes.	Unknown.	Total.
Private Houses, occupied.	417	40	..	178	5	24	14	3	1	..	..	13	214	909
Lodging-Houses	103	8	2	14	..	10	1	1	3	..	..	4	23	169
Sale-Shops or Offices . . . . .	..	6	4	22	10	..	..	55	..	1	1	1	74	174
Victuallers	23	6	6	34	7	..	..	17	8	..	..	1	54	158
Carpenters . . . . .	..	4	48	3	1	1	..	2	..	..	..	..	32	92
Bakers . . . . .	..	2	42	6	..	..	..	7	..	..	..	1	12	69
Oil and Colourmen . . . . .	..	6	15	1	..	..	..	3	..	..	1	1	14	41
Stables . . . . .	..	9	..	5	..	..	..	..	..	..	3	1	18	36
Cabinet-makers . . . . .	..	1	10	3	..	..	..	..	..	..	..	..	17	32
Tinmen and Braziers, &c. . . . .	..	..	17	1	1	..	..	..	..	..	..	..	9	28
Booksellers, &c. . . . .	..	1	3	2	1	..	..	9	..	..	..	..	11	27
Warehouses . . . . .	..	1	..	4	2	..	..	..	..	..	1	2	16	26
Hat-makers . . . . .	..	..	16	4	..	..	..	3	..	..	..	1	1	25
Brokers, and Dealers in } Old Clothes	2	..	2	2	..	9	..	..	..	..	1	2	13	24
Grocers . . . . .	..	1	1	1	..	..	..	7	..	..	..	..	18	23
Ships . . . . .	..	..	4	..	8	..	1	..	..	3	4	..	6	21
Wine and Spirit Sellers . . . . .	..	..	12	2	1	..	..	..	..	..	..	5	1	21
Drapers and Mercers . . . . .	..	3	..	1	..	..	..	14	..	..	..	..	2	20

It has before been stated, that when fires originated in the dwelling part of premises in which trades or manufactures are carried on, they have been classed among the private dwellings. This will account for the accidents arising from the setting fire of curtains being confined in the above Table to private or lodging-houses and victuallers, with the exception of two instances, which occurred in the houses of dealers in old clothes.

From an examination of the causes of fire in the separate classes of buildings or trades, it appears that, in private houses, accidents from curtains being set on fire amount to 60 per cent., or 6 out of 10 of the fires whose origin has been traced; and in lodging-houses it amounts to 70 per cent., or 7 out of 10. The principal remaining causes in this class of houses follow in the annexed order: flues ignited, accidents from candles, children playing with fire, and incautious fumigation. In sale-shops and offices more than half the fires arose from accidents by gas, and a third from the ignition of flues and stoves. Out of 102 fires on the premises of victuallers, 41 arose from flues and stoves, 23 from candles, 17 from gas, and 8 from tobacco-smoking. In the remaining trades the fires were chiefly occasioned by the various processes carried on upon the premises, with the exception of booksellers and stationers, grocers, and drapers or mercers, in which accidents from gas largely preponderate.

The total number of buildings in which gas was used was 806, and the number in which it was not used was 1670, or rather more than 2 to 1. The number of fires arising from gas was 153, which is rather less than 1 in 5, compared with the number of houses in which it was burnt.

In stables the largest number of fires have arisen from sparks dropping from candles among the straw, and in this class there were 3 instances of spontaneous combustion. The latter cause originated 4 fires in ships.

Although this Table does not upon the whole present any results which might not, upon reflection, be expected, yet it may serve to suggest to persons engaged in particular trades the necessity of using greater precaution against those accidents to which they are thus shown to be peculiarly liable.

The extent to which persons have protected themselves from the consequences of fire by insurance is shown in the following statement for the years 1836 and 1837.

Number of instances in which insurances had been effected—

On the building and contents	342 = 32 per cent.
" only	120 = 11 "
On the contents only	180 = 17 "
Neither insured	423 = 40 "

Total . . . 1065

If this calculation holds good for the whole of London, two-fifths of the houses in the metropolis are entirely uninsured, and one-third only are insured for both the buildings and contents. The number insured for the contents exceeds that insured for the building.

We will conclude with an enumeration of the principal large fires which have occurred in the metropolis during the period under review,

which may serve, at some future period, as an interesting record. These happily are not very numerous, being only 5 in the 5 years, exclusive of the Royal Exchange, which occurred in January, 1838.

1834, 16th October, Houses of Lords and Commons.

1835, 2nd March, Silver-street, Golden-square.

1836, 26th , , Western Exchange, Burlington Arcade.

 , , 30th August, Fenning's Wharf.

1837, 28th December, Davies's Wharf.

1838, 10th January, Royal Exchange.

In the above list of fires are included only those at which it is believed that a gross loss of upwards of 20,000*l.* was sustained, including insured and uninsured: at all the others the loss was supposed to be under that sum, with the exception of 2 sugar-houses, which are generally expected to be burned down when fairly on fire. These great losses were, in the opinion of the superintendent of the Fire Brigade, attributable either to the nature of the buildings or goods, or to a want of an early supply of water. The Houses of Parliament and Royal Exchange arose from the first of these causes, long galleries, wooden partitions, and a total want of party walls, besides the immense quantity of timber about those old buildings. Many other public buildings are in the same state; the roof of Somerset House is continued round the whole building; and there is no doubt that if a serious fire were to take place there the effects would be most destructive. Silver-street and Burlington Arcade were caused by the light nature of the buildings and the intimate connection at the back; at Burlington Arcade there was also a want of water for some time at the south end of the arcade. The destruction at Fenning's and Davies's wharf arose principally from the inflammable nature of the goods, and, at the former place, from the great extent of the buildings; one building was twice, and another one-and-a-half times the size allowed by the Building Act; and, strange as it may seem, one at least of those warehouses is built up again in direct contradiction to the said Act. The greater part of the large warehouses in the metropolis are above the size permitted by the Building Act. At Davies's Wharf there were 5000 barrels of rough turpentine and 800 tuns of oil, and the heat of this fire was so great that a cast-iron water-pipe *outside* one of the warehouses was melted. It is also worthy of remark, that this fire was caused by the men working in the turpentine-warehouse with naked lights, although about ten months before, when the superintendent of the brigade visited all the large warehouses with two surveyors from the insurance offices, they were most particularly cautioned against that dangerous practice.

R.

Appendix to the Second Report of the Statistical Society of London on the State of Education in Westminster, being a detailed account of each Endowed or Charity School, and of each Infant and Sunday School, in the Parishes of St. Margaret and St. John, Westminster.—[For Report see p. 193 of No. IV.]

ST. MARGARET'S PARISH.

1 and 2.—*The National Society's Central Day and Sunday Schools for Boys and Girls.*

THE buildings in which these schools, and the business of the National Society, are at present carried on, originally belonged to a Committee acting on behalf of the Westminster National Schools; they were erected in the year 1814 at their expense, with the aid of a grant from the Society, and in 1832 they were made over to the parent institution, upon an understanding that the schools should be carried on, as free schools, for the advantage of the poor residing in the neighbourhood. Previous to this arrangement the central school was conducted in Baldwin's-gardens, Gray's-inn-lane, the lease of which property had very nearly expired when the seasonable proposal of the Westminster committee was received.

The institution is conducted altogether upon the principles of the Church of England, and, like the majority of National Schools, its proper denomination is a "Sunday and Daily" school. It is open, without restriction or enquiry, to children of every description, between the ages of 7 and 14, whose parents undertake that they shall keep the rules. Instruction is imparted to them on the system of mutual instruction, called also the monitorial or Madras system. Besides a knowledge of religion, and the reading of the Bible, they are grounded in the principles and practice of arithmetic, are carried forward in writing, and are instructed generally in geography, English history, and matters of general utility; the books being selected from the catalogue of the Society for Promoting Christian Knowledge and of the Committee of General Literature and Education. No works of industry are taught.

The children are instructed in 2 separate rooms, which furnish accommodation sufficient for 400 boys and 250 girls, at an allowance of 6 square feet for each child.

The number of children upon the books is 494, of whom 340 are boys and 154 are girls, all between the ages of 7 and 14. Out of this number of children the average daily attendance is of boys 243, and of girls 90.

The number of admissions in the course of every 3 years is about equal to twice the number of children in the school, so that it must be inferred that, on an average, a new set of scholars is brought under instruction in the short period of every 18 months. The longest period of attendance is 7 years.

The classes consist of about 36 or 40 children each, selected according to their progress or capacities; the girls' school is arranged in 2, and the boys' school in 3 divisions. Each class has its teacher and assistant teacher, who are constantly present, have its management and direction entrusted to them, and are responsible for the behaviour and

improvement of the scholars. An usher or monitor is appointed over the whole school.

The children assemble every morning at 9 o'clock precisely, and the school business is opened with prayers.

The distribution of time for religious exercises, reading, writing, ciphering, &c., in both schools, is made according to the written account, suspended on a board at the entrance of each room. In the girls' school almost the whole of the afternoon is devoted to needlework and knitting. The school closes in winter at 4 o'clock, and in summer at 5; the business of the day ends as it begins, with prayers. Saturday is a holiday.

The teachers and assistant teachers are selected from the most steady, well-behaved, and trustworthy children; they receive weekly rewards, according to their conduct and the improvement and good order of their classes: the rewards are distributed half-yearly in clothing, as far as the committee think proper, and the balance is allowed to accumulate until the child leaves the school.

Every child who quits with a good character, having attained the age of 14 years, may be entitled to reward.

There is a lending-library for the use of children in the higher classes, and for all who leave the institution with a good character. There is also a clothing-club, to which those children whose parents are willing, make weekly contributions, and receive clothes or orders for them, some increase being added; but there is not any system of rewarding a fixed number of children every year.

A public examination of the schools takes place half-yearly.

An adequate idea of the central school cannot be formed, except it is regarded as the instrument by which the National Society accomplishes its general purposes in promoting education, and training masters and mistresses for other schools throughout the country.

The National Society, for Promoting the Education of the Poor, was established under the patronage of His Majesty George III., in 1811, and incorporated in 1817. Its committee consists of the 2 archbishops, the bishops, 10 temporal peers or privy councillors, (of these the Archbishop of Canterbury, by virtue of his office, is always the president,) and the remainder are vice-presidents; vacancies in the number are filled up by their own body. There are also 16 other members who are elected, one-fourth of whom are chosen annually at the general meeting of subscribing members. The only qualification for membership is a donation of 10 guineas, or an annual subscription of 1 guinea.

There is a sub-committee for the management of the central school, in whose absence its affairs are under the control of the clerical superintendent. His business is to visit the school daily, to examine the classes, to see that the national system is fully and faithfully practised; that the registers, books, &c. are properly kept, &c.

On this officer devolves the management of the masters and mistresses in training, the whole of their instruction and examination in religious knowledge, the particular supervision of the part of the school in which they are trained, and the preparing of the certificates upon which they are promoted and appointed to situations.

The schoolmaster and mistress, besides the tuition of the boys and

girls, are charged with the instruction of the masters and mistresses in the mechanical part of the national system.

With regard to the masters and mistresses in training for schools, two descriptions of persons are officially received for instruction at the central institution, viz.—

1. Masters and mistresses in training, who are to be provided with appointments if their conduct and ability prove such as to justify recommendation.

2. Masters and mistresses from the country, who have already obtained appointments.

Persons desirous of entering under the former class are required to produce a certificate, duly attested by the clergyman of the parish where they have resided, and satisfactory testimonials from three respectable householders, to whom they have been personally known for a length of time. They are examined as to their proficiency, and, if approved, are in the first instance received as probationers only, and, until promoted (after further examination and trial) to the rank of candidates for a situation, they are liable to be discontinued by the Society as unsuitable for its purposes. The candidates for a situation are appointed to schools as opportunities offer, according to their qualifications and eligibility.

Masters and mistresses from the country are received for instruction on producing the proper form, duly filled up, together with their appointments; they also undergo an examination on admission.

One division of the classes in each school is set apart for the benefit of the persons in training, and is taught entirely by them, and they are considered to be responsible for the good conduct and progress of the scholars under their care, as if the children actually constituted a portion of their own school. And from time to time, as the classes in this division are examined, their abilities and defects become the subject of observation.

By this arrangement they have an opportunity of putting in practice the knowledge acquired in passing through the classes, or by their other studies, and of proving their fitness for the duties which they are learning to discharge; and the other divisions of the school, being taught by the children, and superintended solely by the schoolmaster or schoolmistress, present a complete specimen of the system of mutual instruction.

The regulations just enumerated apply to mistresses as well as masters.

In addition to the preceding, the masters in training assemble in the class-room at appointed times, and occupy themselves under the inspection of the schoolmaster, in studying and preparing the subjects determined on by the clerical superintendent.

Both the masters and mistresses assemble every Saturday morning for examination by the clerical superintendent in these subjects, and in such other information as they may have acquired from the books provided for their instruction.

The schoolmistresses are boarded and lodged at a house prepared for their accommodation in Smith's Square, where a respectable and well qualified matron resides, whose office it is to superintend the studies of

these females, and carry on their instruction in the evenings and at other times when their attendance is not required in the central school, as well as to afford them a comfortable asylum and the means of support at a reduced rate of expense.

The establishment here referred to also serves for the protection of the females who are qualifying themselves under the National Society's auspices as mistresses of infant schools, and, for this purpose, are attending the Infant School in Tufton-street, an institution which has been lent to the Society for the purposes of training teachers, until more adequate accommodation can be provided.

In all cases, the instruction afforded by the Society is gratuitous; and a certain number of those masters in training, who have most distinguished themselves by application and intelligence, receive a weekly allowance of half-a-guinea. The mistresses in training may obtain a small gratuity on leaving, if distinguished by good conduct and satisfactory progress during their probation. Schools are supplied with masters and mistresses, for a limited period, at 1*l.* 1*s.* 6*d.* and 1*l.* 1*s.* a week respectively. Assistant boys and girls are also sent if required.

It appears that, according to the plan and regulations here set forth, since the year 1811 to the present time, independently of the instruction which has been given to thousands of poor children, 2695 adult persons have, through the medium of this institution, been trained in the mechanical practices of the Madras system, and at the same time subjected to a course of religious instruction.

The following Table shews the particulars of this statement; and it appears that, on an average, the masters and mistresses continue in training for five months, during which period they are frequently employed in the temporary organisation of national schools:—

		Teachers received on Probation at their own request.		Teachers received into Training from Local Schools.		Teachers provided with Permanent Situations.		Teachers in Training sent out for the temporary charge of Schools.	
		Mast.	Mistr.	Mast.	Mistr.	Mast.	Mistr.	Mast.	Mistr.
1811 to 1838 1838 to 1838	At Baldwin's Gardens .	599	408	609	235	452	361	410	218
		318	307	91	78	197	173	88	65
	At Westminster . . .	917	715	700	363	649	534	498	283
		1633		1063		1183		781	

Besides the principal central school of the parent society here referred to, there are 46 district central institutions, designed to serve as model schools for the surrounding districts, and as suitable places for the instruction of masters and mistresses, who are unable to visit the parent institution, in the system of education.

In most of the district central schools small weekly payments are made by the children for their instruction, and there are lending-libraries attached to them.

The expenses incurred by the National Society on account of the

training department at Westminster are as follows: clerical superintendent and chaplain, 350*l.*; schoolmaster, 105*l.*; schoolmistress, 73*l.* 10*s.*; matron of the boarding-house 76*l.* (the 8 latter with a house and coals); teacher of singing to the children, 50*l.*

The funds, out of which the operations of the National Society here referred to have been conducted, arise entirely from voluntary contributions.

3.—*The Pimlico British Day School for Boys, Palace-street.*

Established in 1820. It is supported by a congregation of Independents, but children of all other denominations are admitted.

Number on the books 200 between the ages of 6 and 14. Daily average attendance 160. Usually remain 3 years. Longest period of attendance has been 7 years. Number of new scholars entered during the last year 207.

It is supported by congregational collections in Buckingham-street chapel, by public subscription, and by payments of 1*s.* per month by each scholar; though no one unable to pay is excluded. The master receives about 84*l.* 10*s.* per annum, if the payments from the scholars amount to so much, and is assisted by 16 monitors. The course of instruction comprehends reading, writing, arithmetic, grammar, geography, history, mensuration, and moral and religious duties by reading the Scriptures. The system of teaching is the British and Foreign by monitors in classes, but some backward children receive individual instruction. Lectures are given on history, the elements of astronomy, &c., and the scholars are questioned on what they learn. An examination is held once in the year. The school is visited almost daily by the Independent minister, and by the deacon. It is orderly, clean, and well ventilated.

4.—*The Pimlico British Day School for Girls, Palace-street.*

This school, which is supported by the same congregation and conducted on the same system as the last, was established in 1821.

Number on the books 110, between the ages of 6 and 14. Average daily attendance 80. Usual time of remaining at the school 3 years, and the longest period of continuance has been 6 years. 124 new scholars entered during the last year.

The mistress receives about 52*l.* per annum, which salary is independent of that of her husband, who is the master of the boys' school on the same premises, and is assisted by monitors in teaching, in classes, reading, writing, arithmetic, sewing, grammar, geography, history, with domestic, moral, and religious duties. The system of teaching is the British and Foreign.

The children are questioned on what they learn; and the school is visited by the same parties, and is in the same commendable state, as the preceding school for boys. Connected with these two schools are the Infant school, No. 21, the Sunday schools for boys and girls, Nos. 23 and 24, and the Infant Sunday school, No. 25, which are conducted under the same roof. The zeal of the master has also induced him to establish a Sabbath evening class for pupils of rather a more advanced age, whom he instructs gratuitously.

5.—*St. Margaret's and St. John's Workhouse Day and Sunday School for Boys.*

Founded October, 1837, on the National System. It is supported out of the Poor-rates, and is connected with the Established Church. The scholars are children of paupers. There are at present 107 boys between the ages of 6 and 15, who are boarded, clothed, and educated. They learn and work on alternate days. Their employment consists in winding cotton, mending shoes and clothes, and they are taught reading, writing, and arithmetic, with moral and religious duties. They are allowed to remain until the age of 15. A non-resident master receives 70*l.* per annum, and is assisted by 6 monitors, who are boys in the school. Questions are asked on what is learned, and the school is visited every Friday by the governor of the workhouse, and by the churchwardens and overseers. It is orderly, clean, and well ventilated.

Until the age of 6, boys and girls are kept in a nursery, where they are comfortably maintained, and taught to spell. At present the nursery contains 22 boys and 22 girls.

6.—*St. Margaret's and St. John's Workhouse Day and Sunday School for Girls.*

Established at the same time as the preceding school for boys, on the same plan and principles, and supported by the same means. The number of scholars is 79. They work and learn on alternate days, and are taught by the master of the boy's school, in the absence of the boys. A mistress is paid 2*s.* weekly to superintend them out of school, with respect to cleanliness and morals. They may remain until the age of 15. 102 have been entered on the books during the last year. The instruction comprehends reading, writing, arithmetic, sewing and knitting, with domestic, moral, and religious duties. The system adopted, the visitors, and the state of the school, are the same as in the school for boys.

7.—*Miss Neeve's Girls' Day School, York Gardens.*

This school, as well as the Infant school, No. 19, was established in 1824 by Miss Neeve. Not connected with any particular religious denomination. Number of scholars 96, between the ages of 7 and 14. Several children have continued at the school above 6 years. About 90 new scholars entered during the last year. The scholars pay 1*d.* per week, and for writing 2*d.*; Miss Neeve supplies the remaining sum required to defray the expenses of the school. The remuneration to the mistress amounts to about 30*l.* per annum. There is a lending library, and a clothing society attached to the school. The system of teaching is by monitors in classes. It comprehends reading, writing, arithmetic, and sewing, with moral and religious duties. The children are questioned. The school has many visitors, and is orderly and well ventilated.

8.—*The Blue Coat School for Boys and Girls, and the Grand Khaibar School for Boys, Little Chapel-street.*

These two schools constitute parts of the same establishment. The Blue Coat school was founded in 1688. It contains 52 boys and 34 girls, between the ages of 5 and 15, who are all taught gratuitously, and

liberally clothed, and usually remain from 5 to 7 years. The school is supported by congregational collections and public subscriptions, in addition to the proceeds of a small funded property. Reading, writing, arithmetic, and sewing are taught, with domestic, moral, and religious duties. Prizes are awarded. The teachers are the master and his wife, who receive 100*l.* per annum, with house and coals, and 2 monitors. The scholars are questioned, and undergo quarterly examinations. The school is visited by its governors, and is orderly, clean, and very well ventilated. There is a separate school-room for the girls. The number of scholars of the Grand Khaibar school is 20, who are educated with those of the Blue Coat school gratuitously, but not clothed. This school has existed above a century; it is supported by the subscriptions of 47 members, and is similar in all other respects to the school just described, with which it is combined, with this exception, that the boys sit apart from those of the other school.

9.—*St. Margaret's Parochial School of Scriptural Instruction for Boys, Knightsbridge Green.*

This school was established in September, 1837. It is on the National System, and is connected with the Established Church. It contains 56 scholars, of whom 14 are under the age of 5, and 42 between 5 and 12. Weekly payments of 2*d.* or 3*d.* are made by the scholars to the master, but 10, from inability to pay, receive gratuitous instruction. They are taught in classes by the master and 3 monitors reading, writing, arithmetic, grammar, geography, scripture-history, with moral and religious duties. They are questioned on what they learn. The school is orderly and clean, and is visited by the parochial clergymen. The teacher at present receives only the payments of the scholars.

10.—*St. Margaret's Parochial School of Scriptural Instruction for Girls, Knightsbridge Green.*

Established in September, 1837, with the school for boys just described. It contains 36 scholars, between the ages of 5 and 11. The statements in the preceding account apply equally to the present school, with respect to the several particulars noticed. Reading, writing, arithmetic, sewing, knitting, the scriptures, and moral duties, are taught by the mistress and 3 monitors.

11.—*Westminster New Charity Day School for Boys, Dacre-street.*

Established in 1795 on the National System, and connected with the Established Church. Has at present 50 boys, between the ages of 8 and 13, of whom 25 are partially clothed. Many have attended during the last 6 years. Four new scholars entered during the past year. It is supported by congregational collections twice a year at Broadway Church and public subscriptions. All are taught gratis. The master is assisted by 3 monitors, and receives, in conjunction with his wife, who is the mistress of the Westminster New Charity school for girls, 60*l.* per annum, with house, coals, and candles. The instruction comprehends reading, writing, arithmetic, grammar, geography, the scriptures, and psalmody. The children are questioned on what they learn. The school is visited by its governors, and is zealously superintended by the

parochial clergymen. It is tolerably orderly and clean, and well ventilated. The boys attend Broadway Church twice every Sunday.

The master is allowed to take 6 private pupils: at present he has but 1, at 6*d.* per week.

12.—*Westminster New Charity Day School for Girls, Dacre-street.*

Established in 1795, on the National System. The teacher is the wife of the master of the boys' school just described, and precisely the same statements apply to the girls' school, with respect to numbers, ages, and other particulars. They are taught reading, writing, arithmetic, sewing, knitting, the scriptures, and moral duties.

The mistress is allowed to take 6 private pupils, but has only 2 at present, they pay 6*d.* per week each.

13.—*New Pie-street, British and Foreign, Day School for Boys and Girls.*

Established in February, 1836. Not connected with any particular religious denomination. The scholars consist of 20 boys and 30 girls, total 50. 12 boys and 15 girls are under the age of 5, and 8 boys and 15 girls are between 5 and 12. They usually remain 2 years. During the last year 100 new scholars have been entered. The school is supported by public subscriptions, and by a payment of 1*d.* per week by the scholars. From 20 to 30 are taught gratis. The master receives 10*s.* a week, and is assisted by 6 monitors. Reading, arithmetical tables, and sewing are taught, with moral duties and the scriptures. The system is the British and Foreign, as indicated by the title. The children are questioned on their acquirements, and ladies occasionally visit the school, which is orderly and tolerably cleanly and ventilated.

In winter the children, who are generally of the very indigent classes, diminish in attendance by about one-third.

14.—*Tothill-fields Prison School for Boys.*

Established in November, 1835, on the National System. Connected with the Established Church. The number of scholars is 35, between the ages of 8 and 17. The longest period of remaining at the school has been 6 months, and 346 new scholars have entered during the last year. All are taught gratis, and the expense is charged on the county rates. The school is superintended by the chaplain, and a paid master receives 32*s.* 6*d.* per week. The children learn and work on alternate days. Their employment consists in working at the treadmill, picking oakum, and making shoes. They are taught reading and writing, with moral duties and the scriptures. Both the mode of teaching by monitors and by individual instruction are adopted. The children are questioned, and the school is visited by the magistrates and by the chaplain, who examines the children twice a week. It is held in the prison, and is orderly, clean, and well ventilated.

15.—*Tothill-fields Prison School for Girls.*

Established in the prison at the same time, and on the same plan and principles as the school for boys. The number of scholars is 15, between the ages of 8 and 16. Longest period of remaining 2 months. 149 children entered during the past year. It is not necessary to add any further statement of particulars, as it would be only a repetition of what

has just been said respecting the prison school for boys. The girls, however, do not work at the tread-mill. The girls' school is examined by the chaplain once a week.

16.—*Green-Coat Boarding, Day, and Sunday School for Boys, Green-Coat-row.*

Established in 1633. Connected with the Established Church. Number of scholars 21, between the ages of 10 and 14. They usually remain from 3 to 5 years. 4 entered during the last year. It is supported by endowment. All are clothed, fed, and taught gratis. The master is paid 50*l.* per annum, with house, fire, and candles. The instruction comprehends reading, writing, arithmetic, grammar, geography, history, domestic, moral and religious duties, and psalmody. The system of teaching is monitorial, in classes, with questions on what is learned. The school is visited by its governors, and is orderly, clean, and well ventilated. Examinations are held once in the year.

17.—*The Black-Coat, or Palmer's School, for 20 Boys, near Chapel-street.*

Established in 1650, and connected with the Established Church. The number of scholars is 18, between the ages of 8 and 14. Usual period of continuing at the school 7 years. 3 entered in the last year. It is supported by an endowment of the Rev. James Palmer, and occasional benefactions. All the scholars are fully clothed and taught gratis. The master receives £30 per annum, with house, fire, and candles. The instruction comprises reading, writing, arithmetic, rudiments of grammar, with moral and religious duties. The mode of teaching is in classes, with questions on what is learned. The school is visited by the parochial clergyman, and is orderly, clean, and well ventilated. The scholars are children of parents who are or have been decayed housekeepers.

18.—*Regimental School of the Royal Horse Guards (Blues), Hyde Park Barracks.*

Established in 1830. Connected with the Established Church. Is attended by 57 boys, 50 girls (children of soldiers belonging to the corps), and 10 adult soldiers. 7 boys and 10 girls are under 5 years of age, 46 boys and 40 girls are between 5 and 15, and 4 boys are between 15 and 18. 56 have entered within the last year. All are taught gratis, and supplied with stationery by the Duke of York's allowance. Prizes of books are given on the anniversaries of the Queen's birthday. They attend 5 hours every week day, except Saturday, and an hour on Sunday for religious instruction and psalmody. The subjects taught are reading, spelling, writing, arithmetic, grammar, history, mensuration, moral duties, the Scriptures, and catechism. The master is a corporal, and is assisted by 7 monitors. The system adopted is a modification of the National. The scholars are questioned on what they learn, are visited by the Chaplain of the Forces, and are clean and orderly.

19.—*Miss Neeve's Infant School, York-gardens.*

This, as well as the Day-school, No. 7, was established by the above-mentioned lady, in 1824. Connected with the Established Church.

The number of scholars is 75, namely, 40 boys and 35 girls. Of these 24 boys and 18 girls are under the age of 5, and 16 boys and 17 girls are from 5 to 8 years of age. The youngest is 18 months. The longest period of continuance at the school has been 5½ years. Between 50 and 60 have been entered during the past year. It is supported by payments from the children of 1½d. a week, with a few small subscriptions; Miss Neeve supplying any deficiency. The mistress is assisted by 6 monitors. She receives 10s. 6d. per week and the payments from the children. Reading, writing on slates, and mental arithmetic, are taught in classes, with moral duties, and the Scriptures. The children are questioned, and undergo occasional examinations. The school is numerously visited, and is orderly, clean, and well ventilated.

20.—*Dacre-street Infant School.*

Established in 1836. Connected with the Established Church. Number of children attending 70, namely, 30 boys and 40 girls, of whom 15 boys and 15 girls are under 5, and 15 boys and 25 girls from 5 to 8 years of age. The age of the youngest is 1 year. 300 have entered in the last year. It is supported by payments from the scholars of 2d. each, very many of which are paid by the minister of Broadway Chapel of Ease, by whom the school is zealously supported. Many of the children are also supplied with shoes by the same benevolent individual. The mistress receives 12s. a week, and is assisted by monitors. Reading, and the rudiments of arithmetic, grammar, geography, and Scripture history, are taught on the Infant system, with moral duties and the Scriptures. The children are questioned on what they learn, are visited almost daily by the clergyman above-mentioned, and are clean and orderly.

21.—*Pimlico British Infant School.*

Established in 1834. Connected with the Independent congregation, of Buckingham Chapel, and under the superintendence of the same master as the Pimlico British Day-schools, into which the children of this infant school enter as soon as they can read. Children, however, of all denominations, are admitted. Average number attending daily 70, namely, 50 boys and 20 girls. Number on the books 92,—62 boys and 30 girls. 70 under 5 years of age, 22 from 5 to 7. Longest period of continuance at school about 3 years. It is supported by congregational collections, public subscriptions, and payments from the children of 1s. per month each. The mistress is assisted by monitors, and receives about 8s. per week, with board and lodging. Reading is taught, the rudiments of arithmetic, and writing on slates, with moral duties, and the Scriptures. Both monitorial and individual instruction are adopted. The children are questioned, and taught generally on the Home and Colonial Infant System. The school is visited by the Independent minister and deacon daily, and is orderly, clean, and well ventilated.

22.—*Westminster Sunday School for Boys and Girls, Broadway Church.*

This school was established 1809. Meets in the Broadway Church. Number of children on the books 205, namely, 95 boys and 110 girls. Ten boys and 10 girls are under the age of 5, and 85 boys and 100

girls between 5 and 15. Average attendance 170. Usual period of continuance 2 to 4 years. Many have remained sufficiently long to become qualified for teaching. It is supported by congregational collections and public subscriptions. The scholars are all taught gratis. A lending-library and a clothing-society are attached to the school, and prizes are given. Two hours are devoted on Sundays to direct instruction. Reading, moral and religious duties, the Scriptures, and psalmody are taught, on the monitorial system, in classes, by means of 18 teachers. Questions are put to the children on what they learn. They are examined and visited by the minister of the church in which the school is held. They are orderly, and as cleanly as their circumstances permit.

23.—Pimlico Sunday School for Boys, Buckingham Chapel School-House.

This school meets in the rooms of the Pimlico British Schools, and is supported by the same parties. It was established, however, in 1806, before the Day-schools. Number on the books 240, of whom about 220 attend Day-schools. 234 are between 5 and 15, and 6 above 15. Average attendance, about 120. The longest period of continuance at the school has been 9 years. Four hours are devoted to instruction on Sundays. Reading, moral duties, and the Scriptures, are taught. The school is supported by congregational collections and public subscriptions. Fitzroy's system of teaching, by monitors in classes, is adopted, and the school possesses a lending-library. There are visitors, and the children are questioned on what they learn, and examined quarterly by the minister of the chapel. They are orderly and clean, and the room is properly ventilated. 30 male teachers are distributed between this and the Infant Sunday School, No. 25. All the children are taught gratis. A private fund is subscribed by the teachers, for supplying shoes and other articles of clothing to those children who would otherwise be prevented by destitution from attending.

24.—The Pimlico Sunday School for Girls.

Established at the same time, and by the same parties, as the last. Number on the books 233, between the ages of 5 and 15. About 213 attend Day-schools. Average attendance 116. Longest period of continuance 9 years. 179 entered during the past year. It is supported by congregational collections and public subscriptions. Four hours on Sundays are devoted to instruction, and the school possesses a library for lending. Reading, moral duties, the Scriptures, and scriptural catechisms, are taught. The teachers are supplied from a body of 27 females, who are distributed between this, the following, and the Sunday Female School, No. 27. Fitzroy's system of teaching, by monitors in classes, is adopted. The children are questioned, and there are visitors, and quarterly examinations, and the school is clean, orderly, and well ventilated.

25.—Buckingham Chapel Infant Sunday School.

This school is also one of the remarkable cluster of schools established by the congregation of Independents meeting at the Buckingham Chapel. It was established in September, 1834. Number on the books 114 boys, 98 girls, total 212, of whom 84 boys and 92 girls are

under 5 years of age, and 30 boys and 6 girls between 5 and 8. The age of the youngest is 2 years. Some have continued to attend during 3 years. 160 have been entered during the past year. The school is supported by congregational collections and public subscriptions. All are taught gratis, and destitute children are provided with shoes by the charity of the teachers, in the same manner as the children in the last school. Four hours on Sundays are devoted to instruction. Reading, moral and religious duties, are taught. Fitzroy's system of teaching, by monitors in classes, is adopted, and the duties of the school are performed by part of a body of teachers who attend this and the Sunday schools, Nos. 23 and 26. The children are questioned on what they learn, are visited and examined quarterly. The school is orderly, clean, and well ventilated.

26.—Sabbath Evening Class, Palace-street, Pimlico.

This class consists of a few young persons who are or have been attendants at the Palace-street schools, and is held in the Infant school-room. It was commenced in 1832 by Mr. Arnum, the zealous superintendent of these schools, who gives his instruction gratuitously. There are at present 12 scholars between 12 and 17 years of age. They usually attend from 6 to 8 o'clock.

27.—The Buckingham Chapel Branch Sunday School, York-gardens.

Established in 1834. Is a branch of the schools attached to Buckingham Chapel. Number on the books, 55 boys, 45 girls, total 100. Of these, 88 attend Day schools. Average attendance about 50. The age of the oldest is 10, and of the youngest 3. Some have continued to attend since the commencement. Four hours on Sundays are devoted to instruction. Reading, and moral and religious duties are taught. The teachers belong to the body mentioned in the preceding notices. Fitzroy's system of teaching is adopted. The children are questioned; there are quarterly examinations and occasional visitors. The school is orderly, clean, and well ventilated.

28.—Blue-Anchor-yard Sunday School, York-street.

Established in March, 1835. Connected with "The Soldier's Friend Society," but not attached to any religious sect. Number on the books, 28 boys, 37 girls, total 65. 3 boys are under 5 years of age, and 26 boys and 36 girls between 5 and 15. Many have attended since the commencement of the school. 90 entered during the last year. It is supported by congregational collections in the chapel in which it is held. 3 hours on Sundays are devoted to instruction. Reading, moral duties, and the Scriptures are taught gratuitously in classes to all the scholars. There are 5 teachers, 2 male, and 3 female, with 2 monitors. The children are questioned on what they learn, and are clean and orderly.

Attached to the chapel in which this school is held, is a library established by the Soldier's Friend Society, to which all soldiers, of whom a large body is quartered in this neighbourhood, have access throughout the week.

29.—New Pie-street Sunday School for Boys and Girls.

This school is connected with the Day school No. 13, and was

established in March, 1837. It is supported by the same parties, an Independent congregation. Numbers on the books and average attendance 20 boys and 25 girls, total 45. All attend the Day school connected with the establishment. 7 boys and 8 girls are under 5 years of age, and 13 boys and 17 girls are between 5 and 12. The age of the youngest is 3 years. Many have continued to attend from the commencement of the school. About 85 entered during the last year. It is supported by public subscription. In summer $1\frac{1}{2}$ hour, and in winter $3\frac{1}{2}$ hours, are devoted on Sundays to instruction in reading, moral duties, the Scriptures and Watts's Catechism. The British Sunday system is adopted, and the children are taught and questioned, in classes, by 3 male and 2 female teachers. The school is visited by ladies, and by a visitor from the Central British School Society. It is orderly, clean, and properly ventilated.

30.—*Queen's-square Episcopal Chapel Sunday School.*

Established August, 1837. Connected with the Established Church. The school is held in the chapel, and previous to its being shut up lately for repairs, 15 boys and 15 girls attended; since it was re-opened, the number of scholars has been about 10, between the ages of 5 and 13. They are taught gratuitously, reading, moral duties, the Scriptures, and Church Catechism, by a female teacher; are visited by the minister of the chapel, and are clean and orderly.

WESTMINSTER SCHOOL.

Westminster School is a Royal Foundation, richly endowed as St. Peter's College. Its statutes were given by Queen Elizabeth; and the objects of competition are 4 studentships at Oxford, and 3 or 4 scholarships at Cambridge. At present, the total number of scholars is 100; of whom 40 are on the Royal Foundation, called King's (Queen's) scholars, and 4 on a private foundation by Dr. Williams, Bishop of Lincoln. The rest are called Town Boys. Vacancies on the Royal Foundation are filled up once a year by candidates from the Town Boys, who are elected with regard only to merit; and, in school, no distinction whatever is observed between the Queen's scholars and the rest. Those on the bishop's foundation are admitted by the joint nomination of the dean and master. All the King's (Queen's) scholars sleep in one large room, the dormitory, which is 150 feet in length. Their dining-room is a detached building, resembling the halls of the colleges. They are under the care of the under-master when within the precincts of the college, and the head-master is responsible for their conduct elsewhere. The greater part of the Town Boys reside in 4 boarding-houses in the precincts of Dean's-yard, which are superintended by ushers. The rest live at home with their friends: but their conduct is subject at all times to the control and correction of the masters.

A library is attached to the college and to each boarding-house, for the support of which each scholar pays 21s. at entrance, and afterwards 7s. per annum. There is also a small school-library of old editions of the classics, which is but little used. The scholars assemble in one large room, and are divided into an upper and under school, conducted

respectively by the head and under-master, and they are classed in *forms*, according to their relative proficiency. To pass regularly through the school requires 8 years. The course of instruction is the same as that usually followed in public schools, embracing religious and moral instruction in conformity with the principles of the Established Church, the Greek and Latin Classics, English Composition, and Ancient and Modern History.

The afternoon of Saturday, and all the Saints' days marked with red letters in the Calendar, are holidays; with vacations of 3 weeks at Whitsuntide, a month at Bartholomewtide, and a month at Christmas.

A complete synopsis of the daily work of each *form* with a description of the mode of instruction, and a list of the books used in the progress of each boy through the school are given in the account from which the present abstract is made, (see *Journal of Education*, vol. v. p. 30,) and reprinted in a pamphlet.

Every year, at Whitsuntide, King's (Queen's) scholars are elected from the foundation of Westminster to that of Christ Church, Oxford, and Trinity College, Cambridge.

Prizes of books, purchased by the proceeds of bequests from the present Dean of Westminster and other donors, are presented to those whom the master deems worthy of distinction.

In conformity with an injunction of the statutes, and ancient custom, one of the plays of Terence is performed in the dormitory, fitted up as a theatre, shortly previous to the Christmas holidays.

The annual expenses of Town scholars are 53 guineas for board and lodging, and 23 guineas for tuition. The King's (Queen's) scholars pay for board 24 guineas, and 17 guineas for tuition. For entrance-fees 10 guineas are paid to the masters, and 5 guineas to the boarding-house. The bishop's boys pay no fees to the school, and generally lodge with their friends. They are entitled to an equal share of about 70*l.* annually, and are eligible to an exhibition of about 40*l.* per annum, at St. John's College, Cambridge.

ST. JOHN'S PARISH.

1.—*Horseferry-road British School for Boys.*

Established in 1816. It is supported by public subscriptions, and by payments of 3*d.* a-week from each scholar to the master, but no one unable to pay is sent away, though the master's income is derived solely from this source. The number of scholars is 100, from 5 to 13 years of age. In winter it is diminished by one-fourth, and in summer it increases to about 200. The longest period of continuance at the school has been 5 years. 100 have entered during the last year. The instruction comprehends reading, writing, arithmetic, grammar, geography, history, drawing, geometry, mensuration, moral duties, and the Scriptures. The British system of teaching by monitors, in classes, is adopted, and instruction is also communicated individually and by lecturing. The scholars are questioned on what they learn, and are visited occasionally by the Committee of the British School Society, but there is no periodical examination. They are orderly, and the room is well ventilated.

2.—*St. Mary's Catholic School for Boys, for Westminster and Pimlico, 29, Medway-street.*

Established in 1819. Connected with the adjoining Roman Catholic Chapel, which all the scholars are expected to attend. The number varies from 190 to 200, between the ages of 5 and 15, but the average attendance is 100. The longest period of continuance has been 6 years. From 50 to 60 have entered during the last year. It is supported by public subscriptions and by occasional congregational collections. The scholars are all taught gratis, and supplied with pens, ink, and paper. Each has a book to use in school and to take home. The master receives 20s. per week, and with the assistance of 6 monitors teaches reading, writing, arithmetic, grammar, geography, history, moral and religious duties, on which instruction is conveyed by lecturing. The scholars are questioned on what they learn, are visited by the priest, and are examined once a week. The school is orderly, clean, and well ventilated. Books are given by way of reward.

3.—*St. Mary's Catholic School for Girls.*

Established in 1819, and supported by the same parties, and in the same manner, as the last. Number of scholars about 95, between the ages of 7 and 13. Average daily attendance 60. Longest period of continuance 3 years. About 55 have entered during the last year. The mistress is assisted by monitors; she receives 10s. per week and has the use of a good house. Reading, writing, sewing, and moral and religious duties are taught gratis to all the scholars, in classes, and religious instruction is also communicated by lecturing. Each has a book to use in school and to take home. The children are questioned on what they learn, are visited by the priest, and are examined once a month. The school is orderly, clean, and well ventilated. Books are given for prizes, as in the boys' school.

4.—*Vincent-square National School.*

Established in 1834. Connected with the Established Church. Number of scholars 76 boys, 78 girls, total 154, between 5 and 13. Some have continued to attend since the commencement of the school. 259 have entered during the past year. The school is supported by a few public subscriptions and by payments from the scholars of 2d. per week. The mistress receives 30l. per annum, with house and coals. One of 2 female assistants receives 4s. 6d. per week, the other 2s. 6d. The instruction comprehends reading, writing (on slates), arithmetic, sewing, knitting, and moral and religious duties, which are taught in classes, with the assistance of monitors. The children are questioned on what they learn, receive prizes of books, and are visited by the parochial minister and some ladies. The school is orderly, clean, and well ventilated. There is an Infant school (No. 8) connected with this school, conducted by the same mistress and assistants.

5.—*Emery Hill's Male School.*

Established 1708. Connected with the Established Church, and supported by endowment. Number of scholars 25, between the ages of 7 and 14, of whom 18 are on the foundation, and are taught gratui-

tously ; the remaining 7 pay 8d. a week. They must be from 7 to 10 years old when they enter, and must leave at 14. The number entered during the past year has been 14. The master receives 20*l.* a year, with house and coals, and the contributions of those pupils who pay. The instruction comprises reading, writing, arithmetic, the rudiments of grammar, and Latin, with moral and religious duties. The scholars are questioned on what they learn, and the school is clean and well ventilated.

6.—*Vincent-square Infant School.*

This school, which was the first Infant school established in England, was founded in another part of Westminster in the year 1819, and transferred to this site in 1822. It is not connected with any particular religious denomination. The number of scholars is 95 boys, and 75 girls—total 170 ; of whom 60 boys and 45 girls are under 5 years of age, and 35 boys and 30 girls are above 5. The longest period of continuance at the school has been 6 years. 300 have been entered during the last year. A payment of 1*d.* per week is made to the master by each child, and the amount thus received is doubled by a benevolent individual, who built the school-house, and continues to defray all other expenses, including ground-rent, amounting to 20*l.* per annum, water-rates 32*s.* per annum, and coals. The instruction comprises reading, writing on slates, mental arithmetic, sewing to a few, grammar in conversation, and moral and religious duties. Monitors and classes according to the Infant system, and individual instruction, are adopted, and lecturing occasionally. The room is well ventilated: the children are questioned on what they learn, and are tolerably clean and orderly. The teachers consist of a man and wife, with a young female assistant.

7.—*The Tufston-street Infant School.*

This school, which is the Model Infant school of the National Society, was established in 1834. Number of scholars 80 boys and 70 girls—total 150 ; of whom 43 boys and 37 girls are under 5 years of age, and 37 boys and 33 girls are above 5. 210 have entered within the last year. The school is supported by congregational collections, a few public subscriptions, and a payment of 1*d.* a-week from each child. The mistress receives 60*l.* per annum, and teaches reading, arithmetic tables, natural history on the Infant system, moral duties, and the scriptures. The Infant system of classes and monitors, and individual instruction, are adopted. The room is well ventilated: the children are questioned on what they learn, and are clean and orderly.

8.—*Vincent-square Infant School* (connected with the National School on the same Premises).

Established in June, 1837 ; connected with the Established Church. Number of scholars, 54 boys and 40 girls—total 94, between 3 and 6 years of age. 50 have entered during the past year. The school is supported by a few public subscriptions, and by payments of 2*d.* per

week from each scholar. The mistress and assistants are those whose emoluments are stated in the notice of the National School here. One hour daily is devoted to sewing and knitting. Reading, writing on slates, moral duties, and the Church Catechism, are taught. The National Infant System is adopted. The children are questioned, are orderly and clean, and are visited by the minister of the parish and some ladies.

9.—*St. John's Sunday School, Tufton-street.*

Established about 1818, and connected with the Established Church. It meets in the building used for the Model Infant School. Number of scholars, 147 boys and 212 girls—total 359, between 5 and 15 years of age. Average attendance 297, and 187 attend also day-schools; hours of attendance 2 hours before morning-service, and $1\frac{1}{2}$ before evening-service; time devoted to direct instruction $2\frac{1}{2}$ hours. The longest period of continuance has been 8 or 10 years, and 194 have entered during the last year. It is supported by congregational collections in St. John's and St. Margaret's, Westminster, and by public subscriptions and donations.

All are taught gratuitously, in classes and on the National System, reading, moral duties, the Scriptures, Church Catechism, Watts's Divine Songs, and writing twice a week for 2 hours in the upper classes. There is a clothing society attached, and prizes are given. The children are questioned on what they learn, and there are visitors and annual examinations.

10.—*St. John's Auxiliary Sunday School, Vincent-square.*

Established 1834; connected with the Established Church; supported by congregational collections at St. John's and St. Margaret's churches, Westminster, and by public subscriptions and donations. It meets in the room of the Vincent-square Infant School. Number of scholars, 76 boys and 81 girls, between the ages of 6 and 13. Average attendance, 120; 90 also attend day-schools. Some have remained since the commencement, and 124 have entered during the last year.

All are taught gratuitously reading, moral duties, the Scriptures, Church Catechism, Watts's Divine Songs, on the National System, and writing, twice a week, for 2 hours, in the upper classes. A clothing society is attached, and prizes are given. Hours of attendance 2 hours before morning-service, and $1\frac{1}{2}$ before evening-service. The time devoted to direct instruction $2\frac{1}{2}$ hours. The children are questioned on what they read and learn, and there are visitors and annual examinations.

11.—*Romney-street Sunday School, for Boys and Girls.*

Established in 1817 by the congregation of Baptists meeting in Romney-street Chapel. Number of scholars, 50 boys and 90 girls; total, 140, of whom 45 boys and 78 girls are between 5 and 15, the rest above 15; average attendance, 105. The longest period of continuance has been 9 years, and some are now teachers.

All are taught gratuitously reading, and the moral duties, and the

Scriptures. There is no clothing society, but in a Dorcas society connected with the Baptist congregation a preference is given to children of the school in the distribution of clothes, bread, tea, sugar, and coals, for which a collection is made amongst many of the subscribers to the society. The time devoted to direct instruction is $3\frac{1}{2}$ hours. The children are questioned on what they learn, they receive prizes, and are occasionally visited. The school is held in the chapel gallery, and the children are clean and orderly.

12.—Romney-terrace Sunday Wesleyan School.

Established in 1814, and connected with the Wesleyan congregation of Romney-terrace Chapel, in a room under which the school meets. Number of scholars 180 boys and 150 girls—total 330, of whom 120 boys and 100 girls are under 5 years of age, and 60 boys and 50 girls between 5 and 15. Average attendance, 220. Number who also attend day-schools, 250. The longest period which children have continued to attend has been 7 years, until they have become teachers: 155 have entered during the last year. It is supported by two congregational and one annual collection in the Wesleyan chapel, and by public subscriptions. There is a lending-library both for teachers and scholars.

Hours of attendance from 9 to 10 $\frac{1}{2}$. Time devoted to direct instruction $2\frac{1}{2}$ hours. All are taught gratuitously spelling, reading, moral duties, the Scriptures, and the Wesleyan Catechisms; they receive prizes, and there are 4 visitors, who come in rotation.

Increase of Steam-Power in Lancashire and its immediate Vicinity.

THE following Returns, which are taken from a Parliamentary document, will afford some notion of the astonishing progress which the cotton manufacture has made in Lancashire since the year 1835. From the most complete Returns that have yet been procured of the steam-power existing in the manufacturing districts, and which were furnished by the Inspectors of Factories, it appears that the total steam-power employed in the cotton-mills of Lancashire and Cheshire was 24,597 horses. The increase since 1835, including the mills now in erection, is, according to the subjoined account, 17,413 horses, of which 2036 are destined for purposes not connected with the cotton manufacture, leaving 15,377 as the increase in the cotton manufacture alone, which amounts to 62 per cent. upon the power existing in the whole of the counties of Lancashire and Cheshire at the date of the former returns. The 2036 horse-power not destined for the cotton manufacture is divided as follows:—

Collieries	592	Paper-mills	82
Woollen Manufacture . . .	410	Canal	200
Woollen and Cotton ditto .	88	Brewery	15
Silk ditto	74	Iron Forges	35
Linen ditto	38	Nail-making	24
Machine-making	351 $\frac{1}{2}$	Wood-grinding	30
Corn-mills	67	Timber-sawing	30
		Total	2036$\frac{1}{2}$

Statement of the Increase of Steam-Power, which it was expected would occur in Two Years succeeding July 1835, in the Districts enumerated below; extracted from Dr. Kay's Report of July 1835.		Summary of Returns obtained in pursuance of the Order of the Select Committee on the Poor Law Amendment Act, exhibiting the Increase of Steam-Power which has occurred since 1835, and the Amount of Horse-Power of Steam now in course of erection in certain Districts of Lancashire, and in its immediate Vicinity.		
Name of Township or Parish which forms the Centre of the District so called.	Number of Horse-Power.	Name of District.	Number of Horse-Power erected in each District since January or July 1835.	Number of Horse-Power now in course of erection in each District.
Township of Hyde	486	Hyde	499*	230
Ashton and Dukinfield	640	Ashton, Dukinfield, &c.	838	373
Staleybridge	606	Staleybridge	720	82
Saddleworth (Greenfield)	60	Saddleworth	140	..
Stockport	936	Stockport	526	60
Rochdale (district)	660	Rochdale	1,630	96
Heywood	78	Heywood	289	40
Spotland	50	*Spotland . . . . .	..	..
Bagalate	60	*Bagalate . . . . .	..	..
Birch	10	*Birch . . . . .	..	..
Accrington	50	Accrington	180	..
Bolton (district)	755	Bolton	1,149	667
Leigh	50	*Leigh . . . . .	..	..
Horwich	175	*Horwich . . . . .	..	..
Wigan	325	Wigan	671	..
Bury	120	Bury	639	166
Haslingden	70	Haslingden	160	16
Burnley	241	Burnley	933	84
Bacup (district)	196	Bacup	202	209
Todmorden	385	Todmorden	127	247
Colne	100	Colne	242	130
Preston	422	Preston	658	368
Longdendale, near } Mottram }	70	† Longdendale	40	..
Blackburn	280	Blackburn	905	211
Chorley	60	Chorley	60	..
Bollington, near Mac- } clesfield }	80	Macclesfield	140	..
Glossop Dale	187	Glossop	182	..
Manchester	395	Manchester	1,316	1,058
Oldham	60	Oldham	636	74
		Clitheroe	14	36
		Lancaster	30	40
Total Horse-Power	7,507	Total Horse-Power	13,226	4,187

* In the present Returns these small districts are placed under the name of the larger places in the vicinity of which they are severally situate.

† The residue of the power, included under the head "Longdendale" in the former list, will be found in the present Returns in the Glossop list.

An Address Explanatory of the Objects and Advantages of Statistical Enquiries. Delivered at the Second General Meeting of the Statistical Society of Ulster, on the 18th May, 1838. By CAPT. J. E. PORTLOCK, R.E., F.R.S., &c. Belfast, John Hodgson.

IN the above Address, which has been printed at the request of the Statistical Society of Ulster, Captain Portlock has endeavoured to give an outline of the objects and extent of the science of Statistics. He

defends it against those who assert that it is not a science, and that the mode of procedure adopted by the statist of collating and classifying facts is unphilosophical, upon the ground that such objection is a misconception, founded on an illogical comparison between the foundation of a new science and the extension of other sciences already established on a true statistical basis. The botanist, for example, having ascertained, by the continued collection and examination of facts, that certain plants are peculiar to certain soils or positions, may, consistently with philosophical generalization, seek in a new country for such plants in similar soils or positions. But this is an inference from facts already established, not a prejudgment of the case, by assuming that such soils and positions must produce such plants; and applying this illustration to the case in point, it is plain that philosophical generalizations cannot be admitted in statistical science until such a mass of facts has been drawn together as will admit in the first place of primary deductions, and, subsequently, of secondary inferences.

The neglect of facts, and their philosophical combination, gave rise to all those systems in natural science, in which attention being directed to a single organ, natural affinities were often violated, and objects widely different in their relations brought into juxtaposition with each other: and on the other hand, the more clear perception of the necessity of combination, and consequent attention to the general statistics of both the individuals and the groups, have produced those systems which, from their conformability to natural affinities are called natural. But if it was thus impossible to lay the sure foundation of any one science without the previous careful collection and comparison of facts, how much more impossible must it be to understand or to reason upon the complicated operations of social or human life, without a rigid enquiry into the Statistics of every one of its branches, and yet nothing is more descanted on, without preliminary enquiry, than the phenomena of social life. In truth, the systems of Statistics, as well as the Theories of Political Economy which ought to be founded on them, although not of very recent origin, have been hitherto little known and little studied, and in them as in all other sciences, reasoning or theory has preceded the collection of facts, and produced in consequence conjectural results as wild as they are often contradictory. We need not wonder at this, since every science has gone through the same course; the time being only as yesterday since astronomy, zoology, botany, chemistry, and geology, have been cultivated on statistical principles, and thereby established on the sure basis of correct facts. Nor need we doubt that the study of Statistics will, ere long, rescue Political Economy from all the uncertainty in which it is now enveloped.

MISCELLANEOUS.

Education in Bengal.—The district of Nattore has an area of about 350 square miles. It contains 485 villages, occupied by 30,028 families, of which 10,095 are Hindu and 19,933 Mussulman. The total population is 195,296, of whom 100,579 are males, and 94,717 are females; there are, therefore, on an average, 62 families, or 400 individuals, in a village.

Of the total population 34,939 or 17·9 per cent. are under 5 years of age.
 " 39,429 " 20·2 " are between 5 and 14 ditto.
 " 120,928 " 61·9 " are above 14 ditto.

The number of native elementary schools in the district is 27, of which 11 are Hindu and 16 Mussulman. They contain 262 boys. The number of native schools of learning is 38, all of which are Hindu. They contain 397 male students. In 1,588 families, of which 1,277 are Hindu and 311 are Mussulman, the children are receiving occasional domestic instruction. On an average of $1\frac{1}{2}$ child to each family, the number of children in this class will be 2,382. Thus the total number of males receiving instruction is 3,041, of whom 2,644 are between 5 and 14, or 11·6 per cent. of the whole male population between those ages. Females receive no education whatever. Of the adult male population, amounting to 59,500 souls, only 6,121, or 10·3 per cent., possess even the most insignificant degree of instruction. If the non-adult population be added, it will appear that out of 100,579 males, only 8,765, or 8·7 per cent., possess or are acquiring any kind of instruction; and, if the female population be added, the proportion will be further reduced to 4·5 per cent.

Official Report.

Effects of Intemperance.—An Account of the Causes, immediate or remote, which led to the Offences for which 254 Prisoners were committed to Aberdeen Gaol, in the years 1834-5:—

Intemperance	150	=	59 per cent.
Bad Company	59	=	23 "
Prostitution, apart from other causes	16	=	6 "
Vagrant Habits	1	}	12 "
Neglect or Evil Example of Parents	5		
Poverty and Embarrassment	9		
Idleness and Want of Employment	5		
Seduction	2		
Passion	3		
Domestic Evil	1		
Dislike of Army	2	}	
Neglect of Means of Grace	1		
	254		

General Hospital, Jersey.—An Account of the Number of Poor in the General Hospital of Jersey, on the 4th of July, 1836, distinguishing the Causes of their admission therein:—

	Male.	Female.	Total.
Intemperance	32	39	71
Distress caused by Husband's Intemperance . . . . .	..	4	4
Children born of Intemperate Parents	14	13	27
Children of Women in Hospital	2	..	2
" abandoned by Parents	2	1	3
Foundlings	1	3	4
Bad Conduct	1	3	4
Idiotism, frequently united with Intemperance	8	7	15
Insanity	3	2	5
Infirmity and Old Age	2	3	5
Sickness	2	1	3
	67	76	143

* Equal to 71 per cent. of the whole number of cases.

Reports of Officers.

GRAND JURY PRESENTMENTS, IRELAND.

An Abstract of the Accounts of Presentments made by the Grand Juries of each County, City, and Town in Ireland, in the Year 1837.

Counties.	Amount.	Counties.	Amount.	Counties.	Amount
	£.		£.		£.
Antrim . .	50,722	Galway Town .	4347	Meath . . .	21,973
Carrickfergus .	903	Kerry . . .	24,936	Monaghan . .	20,152
Armagh . .	24,499	Kildare . . .	20,903	Queen's County	19,566
Carlow . .	14,421	Kilkenny . .	25,104	Rosecommon .	27,051
Cavan . .	30,543	„ City . .	2781	Sligo . . .	16,159
Clare . .	49,407	King's County .	18,319	Tipperary . .	58,060
Cork . .	68,265	Leitrim . .	14,484	Tyrone . . .	42,567
„ City . .	31,828	Limerick . .	36,258	Waterford . .	21,421
Donegal . .	30,462	„ City . .	7062	„ City . .	6338
Down . .	40,731	Londonderry .	26,798	Westmeath . .	21,714
Dublin . .	21,806	Longford . .	15,499	Wexford . . .	29,260
„ City . .	38,919	Louth . .	11,765	Wicklow . .	20,336
Fermanagh . .	21,711	Drogheda . .	1467		
Galway . .	43,074	Mayo . .	34,928	Total . .	1,016,552

The same, distinguishing the Purposes for which the Presentments were made.

New Roads, Bridges, Pipes, Gulleys, Quay-Walls, or cutting down Hills, and filling up Hollows or Ditches	£.
Repairs of Roads, Bridges, Pipes, Gulleys, or Walls	103,574
Court of Session Houses; Erection or Repair	284,409
Gaols, Bridewells, Houses of Correction; Building or Repairing	8,480
All other Prison and Bridewell Expenses, including Salaries	9,440
Police and Police Establishments, and Payments to Witnesses	105,190
Salaries of all County Officers not included above	121,025
Public Charities	103,665
Repayments of Advances to Government	106,135
Miscellaneous, not included above	106,888
	75,144
Total	1,023,953
Re-presentments, to be deducted	7,401
Total	£ 1,016,552

Commons' Paper, Sess. 1837-8, No. 207.

A Further List of Statistical Papers printed by the Houses of Parliament during the present Session of 1837-8.—(Continued from page 251).

No. HOUSE OF LORDS.

- 292 Irish Magistracy—A List of the Old and New Commission, 1832-38
 304 Tithe Commutation—Cases in which an addition was made for Rates

No. HOUSE OF COMMONS.

- 462 Public Works, Ireland—Sixth Report from Board, 1838
 463 Highways' Act—Report of Select Committee and Evidence, 1838
 556 Deccan Prize-money—Amount received and distributed by the Trustees
 578 Metropolis Police Offices—Report of Select Committee and Evidence, 1838
 585 East India Company—Home Accounts, Receipts and Disbursements, Debts and Credits, Salaries, &c., 1837-8
 612 Inspectors of Factories—Quarterly Reports
 616 Militia Estimates—Report of Select Committee and Evidence, 1838
 619 New Churches—Eighteenth Report of Commissioners, 1838
 621 Pensions—Report of Select Committee and Evidence, 1838

- 626 Joint-Stock Banks—Report of Select Committee and Evidence, 1838
 635 Foreign Grain and Meal—Quantities in Warehouse on 5th July, 1838
 636 Bones—Value of Imports from each Country, 1835-36
 638 Adulteration of Beer—Number of Persons convicted of, 1835-37
 640 Army Expenditure—Estimate and actual Expenditure for the years ending 31st March, 1837
 665 Duchies of Cornwall and Lancaster—Revenue and Expenditure for the year ending June, 1838
 674 Prisoners in the Fleet—Number committed for Contempt of Court since 1830
 683 Loan Societies—List of those Registered in the United Kingdom
 684 Advertisement-duty—Amount paid by each Provincial Newspaper in the year ending June, 1838

PRESENTED BY COMMAND OF HER MAJESTY.

River Shannon Navigation—Third Report of Commissioners
 Charities in England and Wales—Thirty-second Report of Commissioners (Three Parts)
 War in Spain—Account of Stores, &c. furnished to Queen of Spain, &c.

Weekly Average Prices of Corn in England and Wales in the Month of July, 1838.

	Weeks ending July				Average of the Month.
	6th	13th	20th	27th	
	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat . . .	68 0	69 0	68 2	69 1	68 3
Barley . . .	31 10	31 5	32 5	31 8	31 10
Oats . . .	22 7	22 11	22 10	22 10.	22 9
Rye . . .	36 3	34 7	35 9	36 4	35 8
Beans . . .	37 8	37 5	37 3	38 2	37 7
Pears . . .	36 11	86 1	35 4	34 4	35 8

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ending 26th June and 24th July, 1838.

Quarters ending	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
26th June. .	£. 19,047,000	£. 10,436,000	£. 29,473,000	£. 22,534,000	£. 9,722,000	£. 32,076,000
24th July. .	£. 19,286,000	£. 10,424,000	£. 29,710,000	£. 22,601,000	£. 9,749,000	£. 32,350,000

An Account of the aggregate Amount of Notes circulated in England and Wales, by Private Banks and by Joint Stock Banks and their Branches, respectively, in each of the Quarters ended 31st March and 30th June, 1838.

Quarters ended.	Private Banks.	Joint-Stock Banks.	Total.
	£.	£.	£.
March 31st . . .	7,005,472	3,921,039	10,926,511
June 30th . . .	7,393,247	4,362,256	11,745,503

JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

OCTOBER, 1838.

**EIGHTH MEETING OF THE BRITISH ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE. August, 1838.**

BEFORE commencing to report the proceedings of the Statistical Section of the Association, it will be expedient to notice certain changes which have been made at the present meeting in the constitution of the General Committee. According to the regulations established last year at Liverpool, the Statistical Societies of London and Manchester were placed in a separate class by themselves, and were entitled to send only three delegates to the General Committee. By the recent regulations they are entitled to the same privileges as other philosophical societies, of sending three delegates to the General Committee, while the contributors to their publications are admitted to the same body in like manner as the contributors to the transactions of any other philosophical society.

The following are the new laws:—

1. That there be five classes of persons eligible to the General Committee.
2. The first class to consist of the President, Vice Presidents, and other Officers of the Association, past and present, and Authors of Reports prepared by direction of the Association and published under its sanction.
3. The second class to consist of Members who have communicated any paper to a philosophical society, which has been published in its transactions, on such a subject as is taken into consideration at the Sectional Meetings of the Association.
4. Office-bearers or delegates, not exceeding three in number, from philosophical societies publishing transactions, to constitute the third class.
5. Office-bearers or delegates, not exceeding three in number, from philosophical societies established in towns where the Association has met, or holds its meetings, to form the fourth class.
6. Foreigners and other distinguished individuals, whose presence might be deemed advisable, nominated in writing by the President and the General Secretaries, to form the fifth class.

Some discussion arose upon the third law, whether the word "Transactions" would not exclude contributors to the "Journals" of the Statistical Society of London and the Royal Geographical Society, upon which it was determined, in order to remove this difficulty, that the following rider should be added to the third, fourth, and fifth laws, viz., "The Council having the power to decide upon the interpretation of the law in all cases of doubt or difficulty."

The following extract from the Report of the General Secretaries, which was read before the General Meeting on Monday, the 20th

August, also deserves notice, as affording another testimony to the value and importance of statistical labours :—

“The merits of the Statistical Section have already been made manifest by the collection of a great variety of very important data. On this occasion we have to notice a very perspicuous and well-arranged Report, which appears in our Transactions, upon the statistics of a large province of Hindostan, which sufficiently proves that a statist who would really contribute to the advancement of statistical science by collecting facts in distant regions must possess no slight qualifications. In vain, in the absence of other branches of essential knowledge, may he accumulate half-digested and ill-assorted observations; he must also combine, as in the person of Colonel Sykes, the acquirements of the naturalist and geologist with those of an accomplished soldier and of a man of general information.”

“The accumulation of such facts is obviously a very fit part of the labours of this Association, for they prove statistics to be truly a science of method. This science occupies the same relation to political economy, in its most comprehensive sense, which astronomical observations held relatively to astronomy, before the discoveries of mechanical philosophy enabled recent philosophers to make those early observations perform a mighty part in testing the great primal truths of physical philosophy, and applying them to explain, and even to predict, the varied motions and phenomena of the earth and heavens. Such a stage there must be in every inductive science—one in which immediate straining after comprehensive truths would be rash, while the marshalling and classing phenomena is a task full of usefulness and hope. Those only who mistake the stage of discovery in which statistical observers are now placed, who do not see that, at present, observation without premature speculation is the one and necessary step towards wise truths, will either be impatient to weave rash theories from our present imperfect materials, or to scoff at the unscientific character of those who labour patiently to increase and arrange them. The analogy between the early stages of astronomy and the actual position of statistics might be made more complete. The secular character of many classes of statistical observations necessary to elucidate difficulties and disentangle truth might be easily demonstrated; but enough has been said for the purpose of indicating the really scientific character of this useful branch of our Institution.”

The Statistical Section commenced its proceedings on Monday, the 20th August, having the following gentlemen for its Officers and Committee :—

President.—Lieut.-Col. Sykes, F.S.S.

Vice-Presidents.—Sir C. Lemon, Bart., M.P., F.S.S.; G. R. Porter, Esq., F.S.S.; Charles William Bigge, Esq.

Secretaries.—James Heywood, Esq., F.S.S.; W. Rainer Wood, Esq.; William Cargill, Esq.

Committee.—John Bowring, LL.D., F.S.S.; Major-Gen. Briggs, F.S.S.; William Henry Charlton, Esq.; William Felkin, Esq., F.S.S.; Samuel Hare, Esq.; L. Hindmarsh, Esq.; James Losh, Esq.; Rev. Joseph M'Alister; C. G. L. Menteith, Esq.; John Minter Morgan, Esq., F.S.S.; Rawson W. Rawson, Esq., F.S.S.; Sir Matthew White Ridley, Bart.; Henry Romilly, Esq.; John Shuttleworth, Esq.; William Cook Taylor, LL.D., F.S.S.; James Aspinall Turner, Esq.; Samuel Turner, Esq.; Rev. William Turner, jun.; W. L. Wharton, Esq.; G. W. Wood, Esq., M.P., F.S.S.

As some difficulty may be found in publishing the papers brought before the Section in the same order in which they were read, the subjoined abstract is given of the proceedings of each day :—

Monday, 20th August.

- 1.—Police Returns of Newcastle-upon-Tyne, by Mr. John Stephens, Superintendent of Police. [Page 324.]
- 2.—A Statistical View of Mining Industry in France, by G. R. Porter, Esq., F.S.S., &c. [Page 326.]
- 3.—Statistics of Vitality in Cadiz, by Lt.-Col. Sykes, F.S.S. [Page 337.]

Tuesday, 21st August.

- 1.—Statistical Illustrations of the Principal Universities of Great Britain and Ireland, by the Rev. Henry Longueville Jones, M.A. Presented by James Heywood, Esq., F.S.S.*
- 2.—Educational, Criminal, and other Statistics of Newcastle-upon-Tyne, by Wm. Cargill, Esq., Secretary to the Educational Society of Newcastle. [Page 355.]
- 3.—The State of Agriculture, and Condition of the Agricultural Labourers, in the Northern Division of Northumberland, by L. Hindmarsh, Esq., of Alnwick.*

Wednesday, 22nd August.

- 1.—An Account of the Changes and Present Condition of the Population of New Zealand, by Saxe Bannister, Esq. [Page 362.]
- 2.—Fires in London, by Rawson W. Rawson, Esq., F.S.S.†
- 3.—A Statistical Notice of the Asylum for the Blind, at Newcastle-upon-Tyne, by the Rev. Joseph M'Alistair. [Page 377.]
- 4.—An Account of the Accommodation in Churches and Chapels within the Parish of All-Saints, Newcastle-upon-Tyne. [Page 379.]

Thursday, 23rd August.

- 1.—A Letter from Dr. Potter, of the United States, transmitting the last Annual Report of the Regents of the University of the State of New York. [Page 383.]
- 2.—An Abstract of the Second Report of Railway Commissioners for Ireland, by Rawson W. Rawson, Esq., F.S.S., with Maps and Illustrations by Richard Griffith, Esq.‡
- 3.—Statistical Tables of Nine Principal Collieries in the County of Durham, by W. L. Wharton, Esq., [Page 380.]
- 4.—An Account of the Darton Collieries Club, by T. Wilson, Esq., F.S.S.*
- 5.—Statistics of the Working Classes in the Township of Hyde, in Cheshire, by Wm. Felkin, Esq., F.S.S.*

Friday, 24th August.

- 1.—A Statistical Report of the Parish of Bellingham, in Northumberland, by William Henry Charlton, Esq.*
- 2.—Outline of Subjects for Statistical Enquiries, by Samuel Hare, Esq.*
- 3.—Statistics of Ramshottom, near Bury, in Lancashire, by P. M. M'Dowall, Esq.*
- 4.—General Statistics of Cadiz, by Lieut.-Col. Sykes, F.S.S. [Page 337.]
- 5.—A Statistical Table of Crime in Ireland, by Jeffries Kingsley, Esq.*

* To appear in a future Number.

† See Journal, No. V. (Sept.), p. 283.

‡ Ibid., p. 257.

Of the foregoing papers, the Abstract of the Report of the Irish Railway Commission, and the Account of Fires in London, have appeared in the last number of this Journal. Of the remainder it will be perceived, that seven relate to the Statistics of Newcastle or its vicinity; and to this may be added Mr. Buddle's Paper on the Newcastle Coal-field, which was read in the Geological Section. This fact may be adduced as a striking illustration of the advantages likely to be produced by the Statistical Section, in inducing individuals to collect the statistics of those neighbourhoods in which the Association is likely to hold its meetings, and it would be unjust to omit to mention that at no previous meeting of the Association have so many papers relating to the statistics of the locality been brought forward.

The recommendations of grants proposed by the Committee of the Statistical Section, and adopted by the General Committee, are three in number.

1st, 150*l.* for continuing inquiries into the actual state of schools in England, considered merely as to numerical analysis: the Committee to consist of Sir C. Lemon, Bart., M.P., Lieut.-Col. Sykes, and G. R. Porter, Esq.

2nd, 100*l.* for a continuation of enquiries into the state of the working classes in England, specified in the form of numerical tables; the Committee consisting of Sir C. Lemon, Bart, M.P., Lieut.-Col. Sykes, and G. R. Porter, Esq.

3rd, 50*l.* for enquiries into the Statistics of the Collieries upon the Tyne and Wear, to be conducted by a local Committee, consisting of William Cargill, Esq., John Buddle, Esq., W. L. Wharton, Esq., T. Forster, Esq., and Thomas Wilson, Esq., with power to add to their number.

Abstract of a Return of Prisoners coming under the Cognizance of the Police of Newcastle-upon-Tyne, during the Ten Months from the 2nd of October, 1837, to the 2nd of August, 1838. By Mr. JOHN STEPHENS, Superintendent of Police.

[Read before the Statistical Section of the British Association, 20th August, 1838.]

Prisoners tried at Assizes and Sessions . . .	{ Convicted . . . 81	
	{ Acquitted . . . 20	
Total		101
Prisoners summarily disposed of by Magistrates . . .	{ Convicted . . . 1187	
	{ Discharged . . . 880	
Total		2067
Persons summoned for offences under the Bye Laws, Town Improvement Act, Beer Acts, &c. . .	{ Convicted . . . 284	
	{ Discharged . . . 98	
Total		2168
		382
Total		2550

Of the 2168 prisoners tried by jury or magistrates, 261 are stated to be strangers to the town, or trampers travelling about the country. The number transported was 23; one had died, and 166 had disappeared from the cognizance of the police by other and unknown means. 71 are reported to have betaken themselves to honest and creditable means of

livelihood. The Report does not notice the number of re-committals, nor the proportion of the educated to the uneducated; but it is generally stated, that the returns include re-committals, including some cases which are deemed incorrigible, the parties having been committed ten times during the period; and that a majority of the prisoners could neither read nor write, a few only could read, and a very small proportion were good scholars.

Editor's Note.—The population of Newcastle is at present estimated at about 64,000. In 1831 it amounted only to 42,760; but the increase of building and of trade since that period have caused a very rapid augmentation. One individual alone, Mr. Grainger, to whose enterprise the great improvement and progress of building in Newcastle are mainly attributable, has brought above 600 strange labourers into the town, whose families, averaging 3 individuals each, have increased the population within the last three or four years by at least 2000.

The above statements relate only to ten months; if a corresponding addition be made for the remaining two months of the year, the number committed for trial will be 121, and the number summarily disposed of by magistrates will be 2,480, making a total of 2601. This gives an average proportion of 1 person committed for trial in 529 inhabitants, while the average of Northumberland is only 1 in 1179 individuals, and the average of England 1 in 565; and the average proportion of persons committed for trial and summarily disposed of by magistrates is 1 in 24. It must, however, be borne in mind that a considerable number of the individuals included in the latter class appear before the magistrates several times in the course of the year, some as many as ten times; and that therefore the proportion of the vicious population is really much smaller than it would appear from the statement given without comment. Still the facts shew that in Newcastle the proportion of criminal offenders to the population is very high in comparison with the remainder of the county; and that the county, particularly the agricultural districts, is in a very favourable position as regards the commission of crime. The number of persons committed for trial in the whole of the county of Northumberland during the year 1837 was 189, or 1 in 1179 of the population; and in England and Wales the proportion was 1 in 565 of the population. Indeed, this county was one of the most advantageously situated in this respect during the year 1837, being surpassed only by the counties of Westmoreland and Durham*. If, therefore, the estimated number of 121 persons committed for trial in Newcastle during one year be deducted from 189, the total number committed in Northumberland during 1837, the remainder will be only 68 criminals distributed over a population of 174,000, according to the census of 1831; or if the increase be estimated at 1½ per cent. per annum, the population may be calculated at 192,000 in 1838; yielding a proportion in the first instance of 1 offender in 2558 inhabitants, and in the latter of 1 in 2823.

It appears from the above returns that the number of strangers apprehended during the ten months ending the 2d of August, 1838, was 261; of these 26 were committed for trial, yielding a proportion of 25

* See Journal, No. IV., (Aug.) p. 241.

per cent. of the total number committed for trial; while the proportion among those summarily convicted was only 10 per cent. The same fact of the large proportion of strangers committed for trial in towns is observed in the statement drawn from the annual returns of the chaplain of the Preston Gaol, contained in the Proceedings of the Statistical Society of London, at page 246.

The above returns do not distinguish the sexes of the offenders; but it appears from a statement contained in Mr. Cargill's Report upon the Educational and Criminal Statistics of Newcastle,* that in the period from the 12th of October, 1836, to the 24th of April, 1838, the number of males committed to prison was 757, and of females 507, being a proportion of 3 males to 2 females; whereas the proportion in London is about 3 males to 1 female; and in England and Wales it is 5 males to 1 female. This remarkable disproportion in Newcastle led to some discussion in the Section, from which it was elicited that the female population of the town have very few sources of employment, either in trade or manufactures; and that in consequence of their husbands' wages being usually very large, they are freed from the necessity of exertion, and become too frequently addicted to the use of intoxicating liquors. It was also stated that a large proportion of the female offenders came from a particular quarter of the town, called Sandgate.

As these returns refer only to a portion of a single year they do not afford the means of comparing the nature and amount of crime in Newcastle with the annual statements relating to the county of Northumberland, contained in the Criminal Tables laid before Parliament, nor of drawing any other useful general inferences from the documents in their present shape..

A Statistical View of the recent Progress and present Amount of Mining Industry in France; drawn from the Official Reports of the "Direction Générale des Ponts et Chaussées et des Mines."

By G. R. PORTER, Esq. F.R.S.

[Read before the Statistical Section of the British Association, 20th August, 1838.]

IF, after having completed a careful examination into the condition of the various material elements that together make up the sum of the social and political advantages of England, a man were called upon to declare to which one among those elements our advanced position is chiefly to be ascribed, we can hardly doubt what would be his decision. The mineral deposits found in such rich abundance and in such great variety beneath the soil in so many quarters of the island would at once be acknowledged as the chief source of our manufacturing and commercial greatness, and thence of our political and social advancement.

No country in the world offers a finer field than England for geological researches, and no where has the science of geology been pursued with greater ardour or with better success. It would be superfluous, while addressing any Section of the British Association, to enlarge upon these facts, or to offer in any way to testify to the interest with which the researches of the accomplished geologists included among its members are watched throughout the scientific world. The amount of their

* See page 369.

discoveries, and still more the philosophic spirit in which they are conducted, have shed and are shedding lustre upon our age and country. In the opinion of Sir John Herschel, than whom no one is better qualified to judge on such a subject, "geology, in the magnitude and sublimity of the objects of which it treats, undoubtedly ranks in the scale of the sciences next to astronomy." It is perhaps not reasonable to expect that minds to whom the science owes this proud distinction should descend from the heights of inductive reasoning to the commonplace paths of social and commercial utility; but it is surely surprising that, among a people so proverbially practical as we are, the advantages which under this aspect might be drawn from such researches should be so little the subjects of enquiry as they hitherto have been: even the amount of one of the most important of our mineral products is so much left to conjecture, that the produce of our coal-mines at the present day is variously estimated by men conversant with the subject at from 15,000,000 to 30,000,000 of tons per annum.

To obtain accurate returns of this nature is beyond the power of individuals, and even of the Government unless it should be armed with legislative authority for the purpose. Any such interference with private interests has always been viewed in this country with the greatest jealousy, and it is probable that at no former period of our history would any administration, however powerful for other purposes, have succeeded in obtaining such an authority from Parliament. Its motives in seeking for the information would have been misunderstood, and the value of the knowledge when obtained might even have been questioned. In both these respects, the public mind has made considerable advances of late years; and as it may now be seen that the necessary authority has been given in France, where it is at least as liable to abuse as it would be in this country, and that it has been employed for some years by the French government without producing anything save advantage to the mining interests of that country and to the nation at large, it may be found less difficult than heretofore to obtain the authority of Parliament for the collection of statistical data upon various subjects connected with the productive industry of England.

The law which gives authority to collect statistical details of the mining industry of France was passed by the legislative chambers in April, 1838. The execution of the duties enjoined by that law is entrusted to a public department known as the "*Direction Générale des Ponts et Chaussées et des Mines*," and placed under the ultimate control of the minister of commerce and of public works. Attached to this department is a staff of well-instructed able engineers, who make a personal inspection of every establishment connected with mining operations, and a report is carefully drawn up from materials supplied by these officers, and presented every year to the minister of public works. These reports present a most elaborate view of every branch of mineral industry in each department of the kingdom; and it may excite surprise on the part of an English audience, to learn that 85 out of the 86 departments into which France is divided are, in some branch or other, interested in the enquiry: some of them it is true are so interested in only a trifling degree; but Gers is the only department which does not in any way add to the mineral wealth of France.

In the earlier stage of their labours, the inspecting engineers limited themselves to the collection of information concerning the actual condition of the establishments visited during the current year; but they have since obtained materials for comparing the annual progress of the most important branches, and have compiled and presented tabular statements of the quantity and value of mineral fuel and of various metals produced in each year from 1814 to 1836 inclusive. From these tables, the results of which will be given hereafter, it will be seen at what a rapid rate of increase the mineral resources of France have of late years been developed—a rate which may reasonably suggest the probability of its being in some part owing to the public attention having been drawn to the subject, and still more to suggestions offered to the proprietors of works by accomplished engineers at times when the works have been inspected. The increase in the value of the coal, iron, lead, antimony, copper, manganese, alum, and sulphate of iron, since the system of inspection was begun, has been from 105,750,995 fr. (£4,230,039), in 1832, to 154,228,455 fr. (£6,169,138), in 1836, or 45 per cent., as under:—

	1832	1836
	Francs.	Francs.
Coal, Lignite, and Anthracite . . .	16,079,670	26,607,071
Iron and Steel	87,312,994	124,384,616
Silver and Lead	856,673	821,534
Antimony	71,233	305,032
Copper	247,680	196,924
Manganese	105,150	152,671
Alum and Sulphate of Iron . . .	1,077,595	1,760,607
Total	105,750,995	154,228,455

The increase experienced in the same branches during the four years that preceded these inspections, viz., from 1828 to 1832, amounted to no more than 304,392 fr., or £12,175, while the increase experienced during an equal period under the system of inspection, viz., from 1832 to 1836, has been, as above stated, 48,477,460 fr., or £1,939,098.

Coal.—There are 46 coal-fields (*Bassins houillers*) from which that mineral is obtained in France. These coal-fields are situated in the following departments, 30 in number, which are here arranged in the order of their productiveness, as shewn by the quantity procured in 1835, and stated in English tons:—

	Tons.		Tons.
Loire	812,914	Rhône	7,463
Nord	531,605	Mayenne	6,206
Saône et Loire . . .	142,149	Ardèche	5,229
Aveyron	119,152	Pas-de-Calais . . .	3,736
Gard	45,569	Moselle	3,015
Calvados	41,511	Corrèze	1,763
Nièvre	30,162	Creuse	1,576
Haute Loire	21,883	Vosges	1,356
Loire Inférieure . .	21,742	Dordogne	1,000
Tarn	18,420	Haut Rhin	537
Hérault	16,201	Vendée	504
Haute Saône	16,128	Bas Rhin	177
Allier	13,826	Cantal	177
Maine et Loire . . .	11,556	Lot	60
Puy-de-Dôme	11,387	Aude	22

The coal-mines in the department of the Loire are the most important, as well on account of the quality of their produce as of the extent and geographical position of the field. This occupies the entire width of that narrow part of the district of Forez which separates the Loire from the Rhone, where these two rivers approach the nearest to each other. Being thus situated near two navigable rivers, the produce of the mines readily finds its way to Marseilles, Mulhausen, Paris, and Nantes: Lyons is supplied by means of the rail-road between that city and St. Etienne. There are 45 separate mining establishments, which extend over an area of 42,038 English acres.

In the department du Nord coal is raised by eight different establishments from the coal-field of Valenciennes, which is a prolongation of the great coal formation of Belgium. The produce is distributed by the Scheldt, the Scarpe, the canal of St. Quentin, the Oise, and the Seine, and is used in the department du Nord, in the Pas-de-Calais, and in Paris.

The department of the Saône et Loire contains two distinct coal-fields. The largest of these (Bassin du Creusot et de Blanzey) has 13 mining establishments over a surface of 77,376 acres: only eight of these establishments were in course of prosecution in 1835. At Creusot, where the pits are deepest, the workings are 650 feet below the surface. A large proportion of the produce is used in the iron-works at Creusot, the remainder is distributed by the canal of the Centre to the departments of the Upper Saône and of the Upper and Lower Rhine. The smaller coal-field in this department (Saône et Loire) has three mining establishments in operation, extending over 17,560 acres. The produce, which serves for almost all manufacturing purposes, is conveyed by a railway 17 miles long to the Burgundy Canal, by means of which it is distributed through Alsace and to the valleys of the Yonne and the Seine.

In Aveyron there are three coal-fields, for working which there are 23 mining establishments. The produce is for the most part used in the manufactories of Decazeville and de la Forezie. If the navigation of the Lot were improved the coal of Aveyron might readily be conveyed to Bordeaux.

The Bassin d'Alais, in the department du Gard, although occupying a surface of 66,510 acres, and worked at 20 different points, produced in 1835 less than 50,000 tons. Nearly the whole that is raised is used in the iron-works in the same district: the quantity is thus limited because of the deficiency of roads or other means of distribution. A projected railroad, to connect the mines with the Rhone and the canal of Languedoc, would give a great impulse to mining industry in this quarter, by conveying the produce to Narbonne, Perpignan, Marseilles, and Toulon, thus rendering it available for steam navigation in the Mediterranean.

The Bassin de Littry, in Calvados, supplies fuel to Bayeux, Vire, and Caen. A part of the produce is used on the spot for lime-burning. The first steam-engine that was used in France was employed in 1749 to clear these coal-pits of water.

The produce raised in the remaining 24 departments is so small that

it would be trifling with the time of the Section to offer any particular account of their mines. A Table is subjoined, in which are stated the quantity and value, in English measure and money, of the coal, lignite, and anthracite, respectively, raised in all the departments of France in each year from 1814 to 1836. It will be seen from this Table that the produce has been increased from 675,747 tons, in 1814, to 2,583,587 tons, in 1835, or 282 per cent. If this interval of time is divided into three nearly equal periods, the average annual produce in each period has been as follows:—

7 years—1814 to 1820, 792,496 tons.

8 " 1821 " 1828, 1,197,491 " Increase, 51 per cent.

8 " 1829 " 1836, 1,835,831 " " 53 " from 2nd period.

The increase, comparing the 1st and 3rd periods, is 131 per cent.

The whole number of mines in operation in 1836 was,—

Coal	189—employing 19,813 workmen.
Lignite	44 " 1,181 "
Anthracite	25 " 919 "

Total . . . 258 " 21,913 "

Great as the increase has been of late years in the produce of the French coal-mines, the inspectors give it as their opinion that it is very far from having reached its utmost limit. On the contrary, they predict that this branch of the national industry will shortly exhibit a more rapid progress than any hitherto seen. Large establishments are in the course of formation in the great field of the Loire, as well as in other localities; and it is expected that the opening of cheaper means of communication will give an impulse to coal-mining in quarters where it has hitherto been scarcely attempted.

Statement of the Quantity and Value of Coal, Lignite, and Anthracite, raised in France, in each Year from 1814 to 1836.

Years.	COAL.		LIGNITE.		ANTHRACITE.		TOTAL.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.	Tons.	Value.
		£.		£.		£.		£.
1814	636,825	261,112	23,086	9,161	5,689	1,894	665,610	272,097
1815	715,276	324,823	23,300	11,608	5,735	1,985	744,311	338,416
1816	764,785	322,648	25,504	11,239	4,723	1,646	795,012	335,533
1817	815,329	342,976	27,340	16,060	4,572	1,579	847,141	360,615
1818	723,471	313,704	29,600	14,562	5,018	2,130	758,089	320,386
1819	761,890	333,518	44,113	11,846	8,037	4,374	813,950	349,738
1820	871,980	370,114	43,977	21,464	7,405	3,837	923,362	395,405
1821	913,213	395,771	39,122	19,344	8,676	2,490	959,011	417,605
1822	950,899	400,842	48,603	21,316	8,220	3,773	1,007,722	425,931
1823	950,642	404,846	49,194	22,399	9,313	4,507	1,009,149	431,752
1824	1,065,016	485,695	41,032	19,897	13,322	6,481	1,119,970	462,073
1825	1,176,588	482,698	59,242	25,008	23,374	9,915	1,259,154	517,621
1826	1,217,063	520,812	68,116	29,201	14,966	5,992	1,301,045	556,005
1827	1,344,432	557,130	57,838	35,214	25,483	12,185	1,427,753	604,529
1828	1,403,229	565,733	64,989	26,764	29,647	14,969	1,497,825	607,466
1829	1,378,136	539,847	59,719	22,747	32,512	16,884	1,470,267	579,478
1830	1,477,513	582,118	64,348	24,600	36,761	16,321	1,578,622	622,939
1831	1,403,124	549,452	52,513	19,722	30,631	16,786	1,496,268	585,901
1832	1,549,626	600,389	69,177	22,314	38,398	20,483	1,657,211	643,186
1833	1,633,776	672,893	58,274	26,160	45,180	25,238	1,737,230	724,341
1834	1,962,065	748,946	86,064	31,166	53,967	30,718	2,102,166	810,827
1835	1,957,022	733,281	101,508	39,433	57,603	32,532	2,116,133	865,246
1836	2,394,299	1,000,018	96,240	36,514	54,296	27,750	2,544,835	1,064,282

In this Table metrical quintals are converted into English tons at the rate of 10·1465 metrical quintals to a ton, and francs are reduced to sterling money at the exchange of 25 fr. per pound sterling: fractions are discarded.

During the years embraced in the foregoing table the use of coal in France has been increased in a greater degree than the productiveness of the mines, as will be seen from the following statement of the quantity imported for consumption (*commerce special*), in each year from 1815 to 1836 :—

	Tons.		Tons.
1815 . .	245,653	1826 . .	495,325
1816 . .	315,815	1827 . .	531,800
1817 . .	235,269	1828 . .	570,010
1818 . .	277,624	1829 . .	539,247
1819 . .	234,102	1830 . .	621,459
1820 . .	276,705	1831 . .	533,259
1821 . .	315,785	1832 . .	567,251
1822 . .	332,192	1833 . .	686,118
1823 . .	321,497	1834 . .	730,281
1824 . .	456,644	1835 . .	755,365
1825 . .	499,325	1836 . .	949,373

The greater importations of the last three years have been encouraged by a partial diminution in the rate of duty on consumption—a measure rendered necessary by the rapid extension of steam navigation. This great invention, which appears to be only now beginning to develop its full energies, will probably soon compel a further relaxation on the part of the French government, and will in various ways cause a great and permanently-extending increase to this most important branch of the mining industry of England.

Iron.—At the present time France occupies the second rank among nations as regards the production of iron, England being still immeasurably in advance of France, in which country the extension of this branch of industry is far less than has been effected of late years with us.

There are at this time in France 12 distinct localities or districts, in which the making of iron is prosecuted. The processes employed for the conversion of the ore in these different sets or groups of iron-works differ materially from each other, in respect of the different kinds of fuel employed for the purpose. May it not be owing in a great measure to this circumstance, that improvements in the manufacture have hitherto made a very slow progress in that country? The improvement applicable to the process where one kind of fuel is used may be inapplicable to works where another kind of fuel is consumed, and it will therefore probably be confined to the spot in which it is originated. If the processes used for the conversion of the ore had been identical at first, it would not have been possible thus to limit improvements, which, in whatever district they had begun, must have been adopted throughout the country as speedily as the requisite knowledge could be diffused or the needful apparatus obtained.

The 12 distinct districts in which the making of iron is prosecuted in France are thus distinguished in the official reports :—

DEPARTMENTS.

1. Group of the North-east Ardennes—Moselle—Meuse.
2. „ of the North-west. . . . Eure—Orne—Mayenne—Morbihan—
Sarthe—Loire Inférieure—Côte du
Nord—Eure et Loir—Ille et Vilaine—
Manche—Loir et Cher—Maine et Loire.
3. „ of the Vosges Bas Rhin—Vosges—Moselle.
4. „ of the Jura Côte d'Or—Haute Saône—Doubs—Jura.
5. „ of Champagne and Burgundy, Côte d'Or—Haute Marne—Vosges—
Meuse—Marne—Aube—Yonne.
„ of the Centre Nièvre—Cher—Allier—Saône et Loire.
„ of the Indre and la Vendée . Vendée—Indre—Cher—Vienne—Indre et
Loire—Loir et Cher—Haute Vienne.
8. „ of the coal-fields of the South, Creuse—Puy-de-Dôme—Cantal—Aveyron—
Gard—Ardèche—Loire—Isère—Ain.
9. „ of Périgord Charente—Dordogne—Lot et Garonne—
Tarn et Garonne—Corrèze—Haute
Vienne.
10. „ of the Alps Drôme—Isère—Hautes Alpes—Vaucluse.
11. „ of the Landes Landes—Gironde—Lot et Garonne.
12. „ of the Pyrenees Basses Pyrénées—Hautes Pyrénées—Ar-
riège—Aude—Pyrénées Orientales—
Hérault—Tarn.

The actual and relative importance of these groups may be seen from the following particulars, given in the Report presented in the present year, and having reference to the working of 1836 :—

Group.	Number of Iron Works.	Number of Workmen.	Quantity of Fuel in Tons and Steres.				Quantity of Products.			Value of Products in English Money.
			Wood Charcoal	Coke.	Coal.	Wood.	Cast Iron.	Bar Iron.	Steel.	
1	94	2,233	Tons. 90,844	Tons. 3,530	Tons. 8,230	Steres. 33,583	Tons. 46,223	Tons. 30,450	Tons. 162	£. 530,599
2	59	1,771	54,051	..	3,964	..	23,765	11,182	..	210,238
3	7	388	..	7,315	24,830	..	3,236	9,189	..	147,500
4	148	2,090	126,754	..	910	..	54,737	28,900	581	652,030
5	152	2,807	139,602	..	40,947	..	81,499	42,309	..	691,528
6	124	2,133	71,098	14,094	35,798	..	36,993	27,029	706	501,362
7	21	499	17,564	..	..	..	5,824	2,870	..	61,085
8	15	1,243	..	87,444	115,038	..	28,440	27,276	..	377,158
9	115	1,175	39,130	..	3,399	..	14,893	9,064	96	173,646
10	30	174	6,614	..	351	..	2,021	383	1,120	6,916
11	21	410	17,466	..	32	478	7,118	3,674	..	62,535
12	99	815	30,743	..	..	..	..	9,466	..	171,140
	894	15,738	583,855	112,393	232,399	34,061	303,739	301,691	2,725	3,585,739

The figures given in the foregoing table do not present in all their importance the extent of this branch of industry in France. The number of workmen employed for the production of pig-iron (*fonte*), malleable iron (*gros fer*), and steel, which alone are there included, does not much exceed one-third of the number engaged in all the various processes of the iron manufacture; and the total value of the material produced, instead of being, as in the above statement, £3,585,739, amounted in 1836, according to the returns of the inspectors, to £4,975,424. The following abstract contains all that it appears desirable to offer on this occasion, and presents under five principal divisions the total number of workmen engaged in the manufacture, with the value created by them in each of those divisions :—

	Number of Workmen.	Value Created.
1. Extraction and Preparation of the Ore . .	17,557	£ 500,632
2. Production of Pig-Iron (<i>fonte</i>) . . .	6,776	1,969,132
3. Production of Malleable Iron (<i>gros fer</i>) . .	8,678	1,506,247
4. Founding, Drawing, Rolling, &c. . . .	8,615	812,486
5. Converting, Moulding, Casting, &c. Steel .	2,149	186,927
Total	43,775	£4,975,424

Rather more than 40 per cent. of the value here stated is made up of the cost of the fuel used in the various processes, viz.—

Wood Charcoal	£1,643,826
Wood	13,040
Coke	96,972
Coal	285,235
Peat	694

£2,039,767

This sum is divided among the different processes in the following proportions :—

	£.	Decimal Proportion.
1. Roasting the Ore	1,782	0·087
2. Smelting	1,132,039	55·500
3. Refining, Puddling Furnaces, &c. . .	737,888	36·175
4. Casting, Drawing, Rolling, &c. . .	121,556	5·959
5. Moulding, Casting, &c. Steel . . .	46,502	2·279
Total	2,039,767	100·000

It will be seen that four-fifths in value of the fuel is composed of wood. Coke was not used in the iron-works of France until 1821, and at the present time is employed almost exclusively for processes subsequent to smelting the ore. The proportionate value of different kinds of fuel consumed in the various processes, in each year from 1833 to 1836, has been,—

	1833	1834	1835	1836
Wood Charcoal	0·838	0·818	0·864	0·806
Coal	0·098	0·129	0·098	0·140
Coke	0·062	0·050	0·037	0·048
Wood	0·002	0·003	0·001	0·006
	1·000	1·000	1·000	1·000

The average prices of the different kinds of fuel in 1836, as stated in the Report, were—

Wood Charcoal	54s. 10d. per ton.
Coal	18 5 ”
Coke	20 3 ”
Wood	2 10 per stere.

The increased proportion of wood, observable in the working of 1836, is caused by the substitution in part, in some works, of wood dried by heat or partially carbonized.

By the introduction of a proportion of dry wood in place of charcoal, a diminution in the cost of fuel has been attained; but against this advantage must be placed the smaller produce obtained from the furnace

in a given time, as well as a diminution of metal from a given quantity of ore.

Where wood charcoal alone is used for smelting, it requires eighteen metrical quintals for the production of thirteen metrical quintals of iron. Where coke and coal are used in the proportion of ten of the former to nine of the latter, it requires about three quintals of fuel to produce one quintal of iron. In some cases, coke is used with charcoal in the proportion of one quintal of coke to two quintals of charcoal, and the produce has been eight quintals of iron for ten quintals of fuel. In the first case, (where wood charcoal is used,) the cost of the fuel has been 9.92 fr. per metrical quintal of iron, or 4*l.* 0*s.* 6*d.* per English ton. The cost when coke and coal are used, is stated to be 4.45 fr. per quintal, or 36*s.* 1½*d.* per ton; and in the third case, where coke and charcoal are mixed, the cost is said to be 7.60 fr. per quintal, or 3*l.* 1*s.* 8*d.* per ton. The value assigned to the produce is,—

In the first case, 20.99 fr. per quintal, equal to £8 10 4 per ton.

In the second case, 11.13 fr. " " 8 10 4 "

In the third case, 20.32 fr. " " 8 4 11 "

The mixture of coke and charcoal would, upon the whole, appear to be the most profitable in its result. Deducting from the value of the metal the sum expended for fuel; there would remain, when charcoal alone is used, 4*l.* 9*s.* 10*d.* per ton; when coal and coke are used 2*l.* 14*s.* 2½*d.* per ton, and when coke and charcoal are used 5*l.* 3*s.* 3*d.* per ton. These calculations are of course wholly inapplicable to the circumstances in which the manufacture is placed in this country from the actual and relative cheapness of our mineral fuel.

The use of the hot blast has been adopted in several of the furnaces in France. At first it was found that the iron thus obtained was not so well adapted for making bar iron as that for the smelting of which cold air had been used; but some modifications, which are not particularized in the Reports, have been introduced into the process, and this disadvantage has been remedied.

No account is given of the quantity of iron made in France earlier than 1824; but from that year the account is regularly stated in the Reports, from which the following abstract has been computed:—

Years.	Pig-Iron.	Malleable Iron.	Years.	Pig Iron.	Malleable Iron.
	English Tons.	English Tons.		English Tons.	English Tons.
1824	194,636	139,564	1831	221,423	138,942
1825	195,588	141,396	1832	221,660	141,336
1826	202,756	143,336	1833	232,559	149,982
1827	218,175	146,621	1834	265,028	174,607
1828	217,604	149,117	1835	290,378	206,396
1829	213,868	161,819	1836	303,739	201,691
1830	222,965	146,242			

As in the case of coals, the importations of foreign iron into France have kept pace with the increase in the native production. The Custom House accounts of that country are detailed with great minuteness; but it is not necessary here to particularize the quantities of each description of foreign iron used in France. The value so consumed in each year since 1815, and the amount of duty collected on the same, were as follow:—

Years.	Value of Foreign Iron Imported for use.	Amount of Duty collected.	Years.	Value of Foreign Iron Imported for use.	Amount of Duty collected.
	£.	£.		£.	£.
1815	87,556	29,840	1826	218,212	130,326
1816	98,063	45,600	1827	186,846	98,960
1817	202,205	122,024	1828	179,635	95,073
1818	163,173	89,491	1829	160,625	84,396
1819	164,238	94,180	1830	187,117	100,476
1820	162,107	81,517	1831	123,185	63,644
1821	226,571	126,945	1832	159,222	82,192
1822	144,193	74,540	1833	174,601	91,569
1823	141,501	86,258	1834	200,573	104,598
1824	164,812	94,157	1835	231,208	121,346
1825	150,690	86,894	1836	252,702	122,842

The production in France of metals, other than iron, is of little or no commercial importance at the present time. The whole value created in the articles of lead and silver, antimony, copper, and manganese, amounted in 1836 to less than 60,000*l.*, and gave employment to only 1760 workmen. In noticing this fact the inspectors encourage the hope that some considerable addition may shortly be made to the produce of mining industry applied to the articles just enumerated; they do not, however, explain the grounds upon which this hope should be entertained, further than by noticing the existence in the country of several promising fields for that industry hitherto allowed to remain unproductive, and by stating that they are occupied in collecting information which may serve to facilitate the future attempts of persons desirous of embarking their energies and their capital in this direction.

Lead and Silver.—There are 11 lead-mines in operation in France, situated as under—

Hautes Alpes . . .	2,	produced, in 1836,	46 Tons, valued at £ 1,175
Finistère	1	"	504 " " 11,692
Gard	1	"	4 " " 80
Isère	1	"	54 " " 848
Loire	1	"	22 " " 260
Lozère	1	"	47 " " 1,316
Puy-de-Dôme . .	1	"	30 " " 740
Rhône	3	"	6 " " 98
	11		713 £16,209

The silver obtained from the soil of France is separated from the produce of some of the lead-mines above mentioned: the quantity and value thus yielded in 1836 were,—

Hautes Alpes . . .	203 lbs., valued at £ 660
Finistère	3,517 " " 11,542
Lozère	1,028 " " 3,388
Puy-de-Dôme . . .	324 " " 1,060
	5,072 £16,650*

The quantity of lead of native production supplies but a small part of the wants of the country. The importations into France from foreign countries, principally Spain, for consumption during the five years from 1832 to 1836, have averaged 14,800 tons per annum.

* The value put upon this produce in the Report is thus 5*s.* 6*d.* per oz.

Antimony.—This mineral is produced in France from 11 mines, viz.—

Allier . . .	1, which produced, in 1836, 138 Tons, valued at £3,864		
Ardèche . . .	1	63	1,944
Gard . . .	1	23	628
Haute-Loire . . .	2	22	652
Lozère . . .	4	35	960
Puy-de-Dôme . . .	2	130	4,073
	<u>11</u>	<u>411</u>	<u>£12,121</u>

Copper.—The produce of copper-mines in France, five in number, is quite inconsiderable; three of these mines are in the department of Hautes Alpes, and two are in the department of the Rhone. The quantity of metallic copper which they yielded in 1836 was only 102 tons, and its value £7877. The yearly consumption of foreign copper, principally the produce of Russia and of England, during the five years from 1832 to 1836, has averaged 6235 tons.

Manganese.—The manganese-mines are situated as follows:—

Allier . . .	1, which produced, in 1836, 365 Tons, valued at £1,628		
Aude . . .	1	148	570
Dordogne . . .	3	215	951
Haute-Saône . . .	1	39	31
Saône-et-Loire . . .	1	900	2,926
	<u>7 Mines</u>	<u>1,667 Tons</u>	<u>£6,106</u>

The engineers to whom the task of inspecting the mining establishments of France is entrusted have not confined their enquiries to the objects which have been noticed in this paper: they have included in their Annual Reports the statistics of various branches of industry in which mineral substances are produced or employed; such as bituminous minerals—alum—sulphate of iron—and salt; the produce of quarries—of glass-houses—of porcelain and pottery manufactories—of copper and zinc works—and of chemical processes. By this means, it is shewn that the number of workmen who in 1836 depended for subsistence upon mining operations and their consequences, amounted to 273,364, while the total value created by their joint labour amounted to 877,684,791 fr., or £15,107,392, viz.—

	Establishments.	Workmen.	Value created.
			France.
Coal, Lignite, Anthracite, and Peat . . .	2,219	55,735	30,533,922
Iron and Steel . . . . .	..	43,775	124,385,616
Lead, Silver, Copper, Antimony, Man- ganeſe . . . . .	..	1,760	1,476,161
Bitumens	6	245	192,128
Alum and Sulphate of Iron . . .	19	1,141	1,760,667
Salt . . . . .	..	16,615	10,397,164
Quarries . . . . .	..	70,396	40,350,419
Glass Manufactures . . . . .	..	10,497	47,474,301
Porcelain, Pottery, and Earthenware . . .	..	20,485	27,418,192
Bricks and Tiles, and Lime . . .	..	44,604	51,939,239
Plaster . . . . .	..	4,298	14,713,796
Chemical Products . . . . .	..	2,216	22,043,732
Copper, Zinc, and Lead Works . . .	..	1,597	4,999,524
		<u>273,364</u>	<u>377,684,791</u>

Statistics of Cadiz. By LIEUT.-COLONEL W. H. SYKES, F.R.S.,
Vice-President of the Statistical Society of London.

[Read before the Statistical Section of the British Association, on the 20th and 24th of August, 1838.]

THE city of Cadiz is in latitude $36^{\circ} 31' 53''$ N., and longitude $6^{\circ} 28' 10''$ west of Greenwich. It is situated on the end of a very narrow tongue of land which runs out into the Atlantic from the island of Leon, which is separated from the western coast of Andalusia by a narrow channel. The end of the tongue of land expands a little, and the whole of this expansion is occupied by the city of Cadiz, the fortifications of which are washed on every side but one little spot by the waves, which frequently break over the walls.

The ramparts of Cadiz have a circuit of 7500 Spanish yards; and they comprise four castles: San Sebastian, San Lorenzo, Santa Catalina, and Sancti Petri. The city contains 3740 houses, 223 streets, 34 plazas or squares, most of them little better than courts, 28 churches, 39 public edifices, and 5 gates. Amongst the most remarkable public edifices are the Custom-house; the Light-house, 148 feet high; the manufactory of tobacco; the jail, a handsome new building; the academy of arts, formerly the convent of St. Francisco; the hospitals of St. Juan de Dios, Royal Military, and Mugerres; a building of remarkable magnitude called the Hospicio; and 2 theatres. In 1740 Cadiz contained 5000 families, 8 monasteries of friars, and 1 of nuns.

Population.—Cadiz has 4 parishes within the walls and 1 outside, and for police and municipal objects it is divided into 12 barriers or districts. These barriers comprise a population of 58,525 souls, agreeably to the census of December last, the males being 27,301, and the females 31,224.

Census of Cadiz, as the same stood on the 1st of December, 1837.

Quarters or Parishes.	Districts.	Males, Varones.	Females, Hembras.	Total.
No. 1. Santa Cruz	1. De las Escuelas . . .	2,306	2,780	5,086
	2. Del Populo . . .	2,208	2,235	4,443
	3. De la Merced . . .	4,203	4,327	8,530
	4. De San Carlos . . .	392	510	902
2. Rosario .	5. De San Francisco . .	1,321	1,375	2,696
	6. Del Correo . . .	1,749	1,993	3,742
	7. De la Constitucion . .	2,235	2,590	4,825
3. St. Antonio	8. Del Hercules . . .	2,072	2,842	4,914
	9. De las Cortes . . .	1,410	1,927	3,337
	10. De la Palma . . .	2,514	2,519	5,033
4. St. Lorenzo	11. Del Hospicio . . .	3,386	3,861	7,247
	12. De la Libertad . . .	2,833	3,709	6,542
	Parish outside of the Walls.	672	556	1,228
		27,301	31,224	58,525

Cadiz is a bishopric: the old cathedral was built in 1265, but a magnificent new cathedral is in progress of completion; the bishop for many years having devoted the whole of his revenues to this object, reserving a bare sufficiency for the wants of life.* The chapter consists

* The excellent and illustrious Señor D. Domingo de Silos Moreno.

of the bishop, dean, titular archdeacon, procurator, treasurer, master of the school, the archdeacon of Medina, 9 canons, 12 prebendaries, superior and inferior, a master of the ceremonies; leader of the chorus, a principal sacristan, a verger, and major-domo of the church. The bishop's secretariat consists of a secretary and vice-secretary, a major-domo, a chaplain, and two other officers. To the cathedral is attached a library open daily to the public. The convents of *regulars*, males and females, are suppressed.

Ayuntamiento.—Cadiz is governed by a municipal council called the "Ayuntamiento Constitucional," which consists of the political chief as president, 4 judges (*alcaldes*), 16 magistrates (*regidores*), 3 syndics. All the *alcaldes*, alternately 1 and 2 syndics, and half of the *regidores*, go out annually on the 25th March. Every *bonâ fide* inhabitant, 25 years old, has a right to vote for the councillors, according to the Constitution of 1822, and the elections take place in each parish church.* When the elections are completed, the elected, who are double the number required, choose from amongst themselves the requisite number of *alcaldes* and *regidores*. There are also various commissioners of police, health, public works, education, charity, lotteries, posts, &c. &c.

There is also a Tribunal of Commerce, a Junta (Committee) of Commerce, a Philippine Company, a Society of Friends of the Country, (Sociedad Economica Gaditana de Amigos del Pais,) and a *provincial* deputation: but with this last I have nothing to do.

There are 21 insurance companies or houses that insure or underwrite; there is but 1 meteorological instrument maker, but 2 makers of nautical instruments, but 2 manufacturers of musical instruments, and 25 brokers; but my limits will not permit of further enumeration of trades.

Justice.—There are 2 civil and criminal judges, 20 public notaries, 19 attorneys acting in all the courts, besides 35 learned gentlemen (*señores letrados*), who in fact are advocates.

Militia.—The militia of Cadiz consists of 3 battalions of infantry within the walls; a company without the walls; a company of Light Artillery and the artillery of the fortress, also a regiment of marines. What the usual garrison of *regulars* may be I do not know, but at present the troops of the line are withdrawn for field service.

The statistics of vitality in Cadiz, exhibiting some peculiar features, and the results being unexpected, I have thought it advisable to supply all the details in my possession. The census of the population was taken in December last, and the city was found to contain 58,525 souls, consisting of 27,301 males and 31,224 females; the latter exceeding the former in the proportion of 53·35 per cent. to 46·65 per cent.

The first document is a copy of the official register of burials in the general cemetery outside the walls at Cadiz, containing the burials for every year from 1800 to 1837 inclusive, and distinguishing the place whence the bodies were received. The return embraces *columus* with the following heads: "From the parishes within the walls and the parish of San Jose outside the walls," "Clergy, regular and secular," "Hospital of San Juan de Dios," or John of God. "Royal Military Hos-

* A project of a law promulgated in April last, adapting the numbers of *alcaldes*, assistant *alcaldes*, *regidores*, &c. to the population of each place, will affect the present system. New rules are also laid down qualifying electors.

pital," Hospital of the Carmen, commonly known by the names of the Mugerres, or Women's Hospital, "Executed by Sentence of the Courts of Law," "Hospital of the Place of the Capuchins," "Hospital of the Segunda Aguada," which I presume was a temporary hospital during the prevalence of the yellow fever, "Provisional Civil Hospital," "From the Dépôt of French Prisoners," "Children," "Total of Burials." In this return there is not any distinction of sex; but up to 1824 inclusive the men and women, boys and girls, were distinguished; and why this essential has been discontinued I do not understand, further than that it was asserted that the record was troublesome; but the distinction is still preserved in the parish registers.

The total number of deaths in 38 years was 110,345; but this included four years during which the yellow fever raged, namely, 1800, 1804, 1810, and 1819; and it would be supposed that the increased mortality in these years would affect the averages; but the averages are distributed over so long a period of time that it will be seen that the increased mortality in those years has very little effect.

General Statement of the Bodies buried in the Cemetery outside the walls of Cadiz, from the 24th August, 1800, to the 31st December, 1837, distinguishing whence the bodies came.

Years.	From Pa- rishes.	Clergy, Regular and Secular	Hospital of San Juan de Dios.	Diffu- sion of San Miguel.	Do. del Carmen, vulgo de Mugerres. All Females.	Executed.	Parish of San José.	Aguada Hospit- al.	Do. del Campo de Capu- chinos.	Provisional.	French Pri- soners.	Child- ren.	Total Bodies.
1800	975	52	895	2,230	212	..	170	1,482	..	..	..	3,026	9,042
1801	895	11	293	416	195	1	12	27	..	..	..	512	2,362
1802	809	14	311	235	108	6	20	..	..	..	..	1,307	2,810
1803	716	11	305	197	159	17	6	..	..	..	..	1,658	2,409
1804	1,338	28	551	1,009	259	6	17	37	537	..	..	984	4,766
1805	897	11	335	393	201	1	11	121	..	..	..	787	2,737
1806	818	15	226	314	238	5	7	129	..	..	..	986	2,738
1807	743	13	228	177	199	2	4	51	..	..	..	846	2,373
1808	768	21	238	239	213	..	6	3	..	..	..	927	2,474
1809	803	21	261	236	170	..	8	204	..	..	..	904	2,597
1810	1,454	53	547	440	239	4	28	..	..	..	23	1,518	4,305
1811	1,040	90	979	296	182	2	34	..	..	..	13	1,234	3,113
1812	1,028	23	319	314	246	..	56	..	..	..	..	1,751	3,747
1813	1,185	26	445	395	219	..	8	..	..	..	..	1,961	3,471
1814	855	16	908	122	150	1	12	15	..	..	..	1,100	2,479
1815	827	10	189	122	156	3	8	..	..	..	..	922	2,542
1816	810	13	213	103	156	..	11	..	..	..	..	1,051	2,357
1817	772	16	217	70	162	..	14	..	..	..	..	1,672	2,924
1818	823	15	190	107	142	5	19	..	..	..	..	940	2,261
1819	2,489	34	732	593	292	..	59	474	..	..	..	1,767	6,446
1820	1,030	16	290	185	158	..	27	8	..	..	..	937	2,651
1821	844	11	302	152	146	1	22	..	..	..	..	1,222	2,600
1822	893	19	902	45	140	1	19	..	..	..	..	1,155	2,474
1823	976	16	247	175	150	..	22	..	..	..	..	1,120	2,706
1824	940	8	256	108	174	2	19	..	..	..	..	1,456	2,963
1825	809	7	219	72	151	..	20	..	..	..	..	1,196	2,460
1826	899	13	196	93	150	1	14	..	..	..	..	1,001	2,326
1827	801	10	216	115	142	..	20	..	..	..	..	824	2,199
1828	768	14	166	75	110	2	16	..	..	..	..	806	2,034
1829	824	8	137	36	133	2	20	..	..	..	..	994	2,154
1830	809	14	220	22	144	11	11	..	..	..	..	820	2,171
1831	781	10	277	45	196	4	15	..	..	..	..	778	2,036
1832	969	9	221	51	166	1	22	..	..	..	..	876	2,309
1833	1,394	11	224	57	175	..	65	4	..	..	..	898	2,768
1834	1,026	14	187	46	124	..	17	..	..	..	..	859	2,273
1835	799	19	189	40	190	1	12	..	..	..	..	722	1,896
1836	906	16	126	27	158	..	16	..	..	..	..	783	2,062
1837	1,037	9	184	44	183	..	19	..	..	6	..	1,099	2,581
Total	36,476	656	10,766	9,227	6,567	78	887	2,565	537	6	36	42,554	110,245

• Pirates.

Return of Bodies Buried in the General Cemetery at Cadiz, from 1800 to 1823 inclusive, distinguishing the Sexes, and Boys from Girls.

Years.	Men.	Women.	Boys.	Girls.	Total.	Years.	Men.	Women.	Boys.	Girls.	Total.
1800	8,948	2,763	1,505	1,431	9,048	1812	1,452	768	779	482	3,471
1801	986	864	984	228	3,262	1814	749	630	722	378	2,479
1802	847	656	659	648	3,810	1815	633	631	544	384	2,943
1803	798	613	562	476	3,469	1816	695	611	617	434	3,357
1804	1,957	1,825	533	452	4,766	1817	644	607	861	712	2,924
1805	997	973	439	328	2,737	1818	694	627	545	395	2,261
1806	907	845	518	468	3,738	1819†	3,431	1,328	1,049	718	6,446
1807	790	647	498	348	2,373	1820	1 016	698	538	399	2,651
1808	798	679	561	436	2,474	1821	763	615	735	487	2,600
1809	1,068	635	593	311	2,597	1822	704	615	687	468	2,474
1810*	1,890	897	946	572	4,305	1823	891	698	658	462	2,706
1811	1,018	771	848	476	3,113	1824	789	718	825	631	2,963
1812	1,155	841	1,117	634	3,747						
							28,980	31,437	17,832	12,768	81,007

* Besieged.

† Army going to Buenos Ayres, and yellow fever.

Abstract of the Burials in the Cemetery of Cadiz, in 1837-8.

Years.	Months.	Men.	Women.	Boys.	Girls.	Total.
1837	June . . .	59	59	62	32	212
"	July . . .	42	62	80	56	240
"	August . . .	39	56	80	51	226
"	September . .	29	48	42	46	165
"	October . . .	41	48	49	44	182
"	November . .	37	50	42	47	176
"	December . .	41	53	39	29	162
1838	January . . .	54	51	42	29	176
"	February . .	60	61	35	26	182
"	March . . .	47	57	35	33	172
"	April . . .	63	42	46	38	189
"	May . . .	44	52	54	26	176
		556	639	606	457	2,258

From the above tables are deduced the following results, manifesting even in a more marked manner than in other countries, the excess of mortality amongst males, whether adults or children, over females.

	Total Deaths.	Annual Average Deaths.	Per Cent. of Deaths.
In 86 years the total deaths were	110,245	2640	4·31, or 1 in every 22·13 inhabitants.
In 84 years, striking out the 4 years of yellow fever	85,796	2528	4·31, or 1 in every 22·92 inhabitants.
In the 4 years of yellow fever	24,539	2508	4·96, or 1 in every 20 inhabitants nearly.
Average of last 15 years, no yellow fever	35,007	2634	8·96, or 1 in every 25·07 inhabitants.
For the year 1837-8	2,258	2250	8·96, or 1 in every 25·91 inhabitants.
Children for 33 years	42,564	1119	28·56, or 1 in every 9·39 deaths.
Proportion of children to the whole deaths, 1837-8, . . . . .	..	..	47·08, or 1 in every 2·12 deaths.
For the first 25 years, the deaths of men to the whole deaths	81,007	..	35·77, or 1 in every 2·79 deaths.
Ratio of men to the whole deaths	81,007	..	28·46, or 1 in every 3·77 deaths.
Ratio of women to the whole deaths	81,007	..	22·06, or 1 in every 4·54 deaths.
Ratio of girls to the whole deaths	81,007	..	15·75, or 1 in every 6·35 deaths.
For 1837-8, the male deaths to the male population of 27,501 were . . . . .	..	..	4·23, or 1 in every 23·49 males living.
For 1837-8, the female deaths to the female population of 31,224 were . . . . .	..	..	8·51, or 1 in every 28·46 females living.
For 1837-8, the deaths of men to the whole deaths . . . . .	..	..	34·62, or 1 in every 4·06 deaths.
For 1837-8, the deaths of women to the whole deaths . . . . .	..	..	22·06, or 1 in every 4·54 deaths.
For 1837-8, the deaths of boys to the whole deaths . . . . .	..	..	34·08, or 1 in every 2·92 deaths.
For 1837-8, the deaths of girls to the whole deaths . . . . .	..	..	20·25, or 1 in every 4·94 deaths.

The next subject is the Parochial Returns of Births, Deaths, and Marriages :—

Parochial Returns of the Births, distinguishing the Sexes; of the Marriages; and of the Deaths, distinguishing the Adult Males and Females, and the Boys and the Girls, from the Year 1827 to 1837 inclusive.

PARISH OF SANTA CRUZ.								PARISH OF THE ROSARIO.							
Years.	Births.		Marriages.	Deaths.				Years.	Births.		Marriages.	Deaths.			
	Boys.	Girls.		Men.	Women.	Boys.	Girls.		Boys.	Girls.		Men.	Women.	Boys.	Girls.
1827	261	235	103	94	112	45	40	1827	99	99	31	42	61	19	18
1828	266	229	115	93	116	53	41	1828	109	78	35	43	52	16	15
1829	243	231	112	107	120	117	118	1829	88	91	46	51	60	28	22
1830	262	265	142	125	106	114	90	1830	102	88	44	67	52	17	22
1831	264	243	116	119	118	76	72	1831	115	96	43	53	48	13	17
1832	247	239	125	114	154	77	70	1832	104	94	40	53	60	21	20
1833	280	239	143	162	235	87	94	1833	113	113	51	46	72	19	20
1834	234	214	126	116	136	103	91	1834	107	86	53	52	48	22	16
1835	244	224	132	91	101	81	75	1835	127	95	63	47	42	16	20
1836	237	221	150	115	101	79	80	1836	97	94	43	46	57	14	16
1837*								1837*	107	98	41	39	59	26	40
Annual Average	250.8	238.9	127.3	112.6	132.0	83.4	76.6	Annual Average	106.1	93.4	43.1	48.0	54.6	18.5	18.6

PARISH OF ST. ANTONIO.								PARISH OF ST. LORENZO.							
Years.	Births.		Marriages.	Deaths.				Years.	Births.		Marriages.	Deaths.			
	Boys.	Girls.		Men.	Women.	Boys.	Girls.		Boys.	Girls.		Men.	Women.	Boys.	Girls.
1827	109	104	49	81	107	9	17	1827	276	251	94	72	139	94	76
1828	100	97	54	74	83	11	12	1828	289	248	68	90	136	80	62
1829	96	101	52	96	89	15	13	1829	253	244	77	83	133	150	120
1830	106	90	46	87	91	17	15	1830	279	261	105	110	144	117	124
1831	99	115	62	98	78	15	19	1831	293	272	114	98	142	80	67
1832	105	110	66	106	115	18	19	1832	258	245	107	114	172	109	99
1833	119	104	51	74	82	21	23	1833	267	214	106	157	259	107	80
1834	102	119	61	107	99	28	26	1834	227	226	100	128	175	93	102
1835	95	97	58	91	104	16	13	1835	240	213	91	93	123	80	61
1836	93	92	60	93	89	19	26	1836	235	210	113	112	141	76	83
1837*	88	99	56	86	94	22	27								
Annual Average	102.4	108.8	55.9	93.4	93.7	16.9	19.4	Annual Average	258.9	239.7	97.5	105.9	156.4	98.6	88.4

PARISH OF ST. JOSE.†								PARISH OF CASTRENSE.							
Years.	Births.		Marriages.	Deaths.				Years.	Births.		Marriages.	Deaths.			
	Boys.	Girls.		Men.	Women.	Boys.	Girls.		Boys.	Girls.		Men.	Women.	Boys.	Girls.
1827	17	19	7	11	5	4	2	1827	42	30	11	13	12	10	3
1828	25	25	5	4	6	7	8	1828	37	26	18	20	14	9	5
1829	26	13	6	8	8	10	13	1829	37	22	19	15	5	7	6
1830	24	15	10	3	7	6	5	1830	47	27	22	16	6	5	4
1831	23	18	8	12	3	8	8	1831	21	26	19	9	7	2	2
1832	16	20	4	12	11	12	11	1832	20	26	16	9	7	1	2
1833	23	17	10	31	38	10	9	1833	25	22	16	8	6	2	1
1834	17	16	4	8	4	9	6	1834	13	24	17	14	12	1	..
1835	19	18	9	5	6	6	7	1835	20	30	27	18	7	3	4
1836	20	24	14	8	7	6	3	1836	21	30	16	7	7	6	2
1837†	22	15	8	9	9	12	9	1837*	21	22	20	16	1	8	6
Annual Average	21.0	18.5	7.7	10.2	9.5	7.9	7.2	Annual Average	29.3	28.3	9.1	12.9	8.3	4.6	2.9

* 1837 is not included in the averages.

† Outside the walls.

Average of Annual Births, Marriages, and Deaths, in the different Parishes of Cadiz, from the year 1827 to 1836 inclusive.

	BIRTHS.		Mar- riages.	DEATHS.			
	Boys.	Girls.		Men.	Women.	Boys.	Girls.
Parish of Santa Cruz . .	250·8	238·9	127·3	113·8	132·0	83·4	76·6
Parish of the Rosary . .	106·1	93·4	45·1	48·0	54·6	18·5	18·6
Parish of St. Antonio . .	102·4	103·8	55·9	90·4	83·7	16·9	19·4
Parish of St. Lorenzo . .	258·9	239·7	97·5	105·8	156·4	98·6	88·4
Parish of Castrense . .	29·3	28·3	9·1	12·9	6·3	4·6	2·9
Parish of St. Joseph with- out the walls }	21·0	18·5	7·7	10·2	9·5	7·9	7·2
Total annual average . .	768·5	722·6	342·6	381·1	444·5	229·9	213·1
	1491·1			825·6		443	
				1268·6			
Absolutely buried in the Cemetery				1332·2		858	
				2190·2			

We have here a total from the parish registers of 1268·6, annual deaths only, while the absolute annual average burials amounted to 2190·2 for those 10 years; and the first impression would be that the parish registers were false and useless; but an examination of the admirable return from the cemetery, and that of the Foundling Hospital, enables us to prove not only the accuracy of the parish registers, but that of the cemetery return: the proofs are analytical and synthetical.

Total number of average annual burials in the cemetery for 10 years .		2190·2
Average Annual	{ Deaths in the parish registers	1268·6
	{ ,, Hospital of St. Juan de Dios	197·3
	{ ,, Military Hospital	51·4
	{ ,, Women's Hospital del Carmen	140·9
	{ Executed	2·0
Deaths in the Foundling Hospital in 1837		524·0
		2184·2
Deficiency		6·0

Exhibiting a deficiency of 6 only; and had I been able to have used a ten years' average of deaths in the Foundling Hospital, it is probable there would not have been any discrepancy at all. The above facts manifest the necessity for extreme caution in the collection of statistical data. Had I not previously obtained the return of burials in the cemetery of Cadiz, I might have been satisfied with the copies from the parish registers, and the consequent deductions bearing on vital statistics in Cadiz would have been utterly false and groundless.

At the time of the census in Cadiz in December, 1837, there were 8611 casados, which I presume means families, although the term is applicable to married men.

The proportion of deaths to the cured in the various hospitals is as follows for the year 1837.

Hospital of Misericordia or St. Juan de Dios: total patients admitted and remaining of 1836, 1017; cured 766, died 177: the deaths therefore were 17·40 per cent., or 1 in 5·74 patients admitted. Hos-

pital of Our Lady of the Carmen, usually called the Mugerés or Women's Hospital: admitted and remaining of 1836, 816; cured 563, died, 181. The proportion of deaths therefore was 22·18 per cent., or 1 in 4·50 patients.

In the Foundling Hospital, the admissions and remaining of 1836 were 1250, and the deaths, including those found dead (91) in the rotatory box at the door, was 524, or 41·91 per cent. of the whole admitted, or 1 death of an infant per annum in every 2·48 received.

The deaths in the Civil Hospitals in France in proportion to the patients admitted in 1834 and 1835 were as follows:—

	1834	1835
	1 to 11·27	and 1 to 11·02
To total mortality of all France	1 to 17·40	and 1 to 20·19

The deaths amongst the foundlings in Paris, admitted into the institutions, amounted in the years 1834 and 1835 respectively to 23 and 21 per cent.; exhibiting a frightful balance against Cadiz.

The deaths in Cadiz exceed the births in the proportions of 2190 to 2086.

The marriages are only 1 to 170·8 inhabitants; the proportions in England being for averages of five years from 1796 to 1830, 1 to 123, 121, 127, and 128 respectively, and in France 1 in 130·4. How far this paucity of annual marriages for 10 years in Cadiz will account for the number of foundlings, which amount to 1 in every 3½ births, or 28·5 per cent., it is not for me to determine. The proportion for all France is 1 in 13·085 births; but in Paris, in 1835, it amounted to 35·35 per cent., or 1 in every 2·94 births; while the marriages in that very year amounted to 1 for every 98 inhabitants.

Having struck various averages to exhibit the mortality in Cadiz in the most favourable lights, we see that the value of life within the walls of the city is less than in any other place in Europe from which we have returns that I am acquainted with; the kingdom of Naples losing only 1 in 36 of her inhabitants. I now come to the remarkable fact that this rate of mortality does not extend without the walls; at least, the shipping in the harbour have a very different rate; for Her Majesty's ship *Magicienne*, which was in the bay of Cadiz, anchored off the walls, in a crew of 190 men lost only 2 in 2 years, and 1 of these was an accident; and the French ship of war did not lose a single man during the last year. The average annual burials for 37 years, including the years of yellow fever, from San Jose, outside the walls, is 24, which would give an annual mortality of 1·91 per cent., or 1 in 51·1 only, of the inhabitants of the parish; but those who died in the hospitals and the children are not included, as the numbers are not distinguished on the cemetery return. For the year of the census (1837) the deaths in the parish register were 9 men, 9 women, 12 boys, and 9 girls—total 39; which gives 3·14 per cent., or 1 in 31·5 of the inhabitants—an infinitely more favourable ratio of mortality than the city exhibits; but, were the deaths in the hospitals added, the ratio would not be so favourable. It is not my province to speculate on the causes of the mortality in Cadiz; whether bad water, insufficiency of food, or bad ventilation, and drainage. It is sufficient that I have pointed out the facts;

it will be for others to trace the evils to their sources, and to endeavour to remedy them if they be within the control of man.

JUSTICE.

Return of the Number of Persons committed to the Gaol of Cadiz from 1827 to 1837 inclusive, distinguishing the Number Discharged annually, the Condemnations, the Deaths, and Executions.

Years.	Liberated.	Imprisoned.	To Hard Labour.	Died.	Executed.	Total.
1827	497	80	88	1	1	667
1828	286	130	127	1	2	546
1829	558	141	46	..	..	745
1830	527	290	53	..	10*	885
1831	541	305	84	2	1	933
1832	512	223	81	2	..	818
1833	467	138	146	3	..	754
1834	396	18	4	1	..	419
1835	505	860	95	..	1	1461
1836	365	628	34	2	..	1029
1837	343	251	54	2	..	655
Total .	5002	3064	817	14	15	8912
Average	454·7	278·5	74·3	1·27	1·36	..
Annual Average Committals						810

* Pirates.

Or one committal annually for every 72·25 inhabitants, which is a very small proportion compared with London—1 in 24, or 4·09 per cent., in 1836, or Newcastle, 1 in 27·5, or 33·61 per cent. in 1837. Allowance must also be made for the excited state of public feeling, and the little respect entertained for laws and order in civil strife. Those liberated bear a very large proportion to those condemned; and, deducting the 10 pirates executed in 1830, the remaining executions do not average 1 in 2 years. In my visit to the gaol at Cadiz I did not find one prisoner committed for a capital offence.

In the administration of the law in civil matters I have only the return from the Alcaldea Constitucional, or the office of the Constitutional Judges, of the cases divided into classes submitted for jurisdiction in the year 1837.

	Conciliados, or Settled.	No Conciliados, Not Settled.
Debts and Rents of Houses	1067	337
Matrimonial Discussions	58	35
Quarrels	34	16
Trifling Injuries	17	..
	1176	388
Total . . .	1564	

Besides 603 cases entered in the books for trial, which were accommodated between the parties; so that 1 in every 37·4 inhabitants had a law-suit in 1837.

Return of the Expenses incurred in the Gaol of the City of Cadiz from 1830 to 1837 inclusive, on Account of the Prisoners condemned by the ordinary Jurisdiction, and which Expenses were paid from the Municipal Funds.

	Years.	Reals.
1830	55,018	24
1831	71,291	4
1832	72,459	13
1833	47,063	5
1834	39,787	28
1835	77,226	0
1836	84,016	8
1837	98,334	22

Total . . 545,197 2 or about 5451*l.* sterling.

Independently of the above, the charitable donations to the prisoners are very considerable, to assist in supplying them with clothes and bedding, the gaol simply allowing a board to lie upon, and not furnishing an article of clothing.

EDUCATION.

Return of the Establishments for Education in Cadiz, distinguishing Day Scholars from Boarders and Males from Females, January, 1838.

ESTABLISHMENTS.				DAY SCHOLARS.		BOARDERS.	
Colleges.	Schools.	Academies.	Small Schools.	Males.	Females.	Males.	Females.
2	..	..	..	189	..	81	..
..	29	..	..	1,989	..	12	..
..	..	43	..	16	1,030	..	4
..	..	..	20	37	167	..	1
Total .				2,231	1,197	93	5
				Total .		2,324	1,202
Total Males and Females .						3,526	

The total number of children attending schools being 6·02 per cent. of the population, or one in every 16·51 inhabitants; and supposing the children between 5 and 15 years of age to be 25 per cent. of the population, or 14,631, the per-centage receiving instruction is only 1 in 4·13, or 24·1 per cent.—a proportion infinitely below the lowest averages yet ascertained in England, as Liverpool, 47½ per cent., and Newcastle 51½ per cent. But the 455 poor children receiving instruction in the Hospicio are to be added, and this will slightly improve the averages; making the number of children educated 27·2 per cent., or 1 in every 3·70.

Of the above schools, several are for gratuitous instruction. In the college of St. Bartolome there are 24 scholarships founded by D. Antonio Zapata. The instruction is chiefly in theology, philosophy, and Latin classics. There is a public gratuitous school for boys under the municipal council. A school for poor girls under the chapter; 2 schools, 1 of boys and 1 of girls, for gratuitous instruction, at the expense of the Economical Society, or Friends of the Country. There is

also a school for teaching Latin gratuitously; another for teaching mathematics and commerce gratuitously; and an academy for gratuitous instruction in the fine arts; also a college of medicine and surgery, which was founded in 1748. It consists of a director, 7 professors (*catedráticos*), 2 ditto supernumeraries, 2 assistant professors, and 16 collegiates, or students attached to the college to assist in the clinical lectures. The branch of military surgery has a director, an honorary director, 6 consulting surgeons who are M.D.s, 1 honorary consulting surgeon, 3 primary and 2 secondary professors, and 11 retired surgeons. The branch of pharmacy has a president, 1 member, a secretary, and a notary; and there appear to be 24 apothecaries keeping shops, 2 of whom are doctors, and 3 licentiates, and the rest are without title. There are 53 medical men in Cadiz, exclusive of apothecaries, or 1 doctor to every 1104 inhabitants.

Endowed schools for the gratuitous instruction of children appear to exist pretty generally in the villages; and I have repeatedly met with such advertisements as the following in the Cadiz newspapers.

El Tiempo, 24th March, 1838. The Ayuntamiento of the Villa of Paterna de Rivera notify that the schoolmastership is vacant for primary instruction, endowed with 6 reals per diem, and 200 reals per annum for pens and paper for 25 poor children; and they invite candidates for the office.

Cadiz has a daily newspaper, Sunday included, which has, occasionally, literary and scientific articles in addition to politics and local matters. It is called "El Tiempo," has four royal-quarto pages, and the daily cost is 5 quartos, or about three halfpence English.

CHARITIES.

The following are the hospitals and charitable institutions:—

1. St. Juan de Dios, a hospital for males of all classes. It is under the municipal council; but its immediate government is by a committee of 6 persons.

2. Our Lady of the Carmen, commonly called the Women's Hospital, for poor females. It is under the Society of Mercy or Benevolence; a committee of 11 of which body manages the hospital. At the time I visited the hospital there were 82 patients occupying beds.

3. The National Hospital, to which medicated and vapour baths are attached.

4. The House of Mercy, usually called the Hospicio, is under the Junta Municipal of Benevolence. It embraces an asylum for aged men and women, orphan children, male and female, lunatics, poor married couples; and there is a department for the correction of men and women for slight offences. There is a printing-press, worked by the boys, who are taught trades; and carpenters', shoemakers', tailors', and mat-makers' shops are within the walls of the hospital for their instruction. The girls are taught needle-work and embroidery, and some specimens of their work in laced mantillas are beautiful. Both boys and girls are instructed in reading, writing, and arithmetic, and their religious education is carefully attended to.

5. Foundling Hospital is under the management of a committee of ladies and gentlemen.

6. Asylum for widows or female orphans. This was founded by a benevolent individual, Signor Flagela, and has 47 double rooms, built round a court. The rooms are always occupied; and the patronage is in the dean and chapter.

The following exhibits the state of the different hospitals for 1837. Unfortunately I was unable to obtain the returns for the last 10 years, with the exception of that for the Widow's Hospital.

<i>Hospital of Mercy, vulgo San Juan de Dios.</i>						
Remaining of 1836.	Admitted in 1837.	Admitted to take Uetion.	Total Patients in 1837.	Cured.	Died.	Remaining 1st Jan. 1838.
84	877	56	1017	766	177	74

<i>Hospital of Our Lady of the Carmen, vulgo de Mugerres.</i>							
Remaining of 1836.	Admitted in 1837.	Admitted to take Uetion.	Admitted to lay in.	Total Patients.	Cured.	Died.	Remaining 1st Jan. 1838.
62	637	55	62	816	563	181	72

<i>Foundling Hospital, vulgo La Cuna.</i>								
Remaining of 1836.	Admitted in 1837.	Total of Foundlings.	Adopted.	Reclaimed by Parents.	Transferred to the Hospicio.	Found dead in the Rotatory box.	Died.	Remaining 1st Jan. 1838.
655	595	1250	8	28	29	91	433	661

<i>House of Mercy, vulgo el Hospicio.</i>											
Remaining of 1836 Admitted in 1837	Aged Department.		Children.		Married Department.		Lunatics.		Correctional Department.		Total
	Men.	Women	Boys.	Girls.	Men.	Women	Men.	Women	Men.	Women	
170	200	285	148	23	24	25	20	12	12	12	956
50	73	92	34	9	9	12	11	3	19		312
Total . . .	220	273	417	177	31	33	37	31	15	31	1265
Removed, discharged, or dead }	73	84	100	39	8	10	10	15	15	27	381
Remaining 31st Dec. 1837. }	147	189	317	138	23	23	27	16	..	4	884

The total number assisted in 1837, in the above four establishments, was as follows :—

Hospital of St Juan de Dios,	patients	1017	Remaining 1st Jan. 1838	74
Hospital of Our Lady of the Carmen	patients	816	„	72
Foundling Hospital	infants	1250	„	661
House of Mercy	Poor of both sexes	1265	„	884

Total 4348

Total . . . 1691

Besides the above, 1825 patients were assisted at St. Juan de Dios who were not admitted into the hospital. In a similar manner, assistance was given to 2160 poor women at Our Lady of the Carmen; and

at the Hospicio, independently of its own inmates, 90 poor people were fed daily at the door. The hospitals are for the cure of the sick; but the Hospicio is an asylum, as well as the Foundling Hospital. No questions are asked of patients at the hospitals with respect to country or religion; it is sufficient that they are suffering, to be admitted, provided there be a bed; and a case came within my knowledge of the admission of a poor Englishwoman from Gibraltar into the hospital of Our Lady of the Carmen in the last stage of a consumption—a case which I believe is not admissible into the English hospitals.

The following shews the distribution of the foundlings on the 31st May, 1837, for whom there is not accommodation in the hospital in Cadiz.

In the hospital at Cadiz . . .	38	Out at nurse in Port St. Mary . .	11
Out at Nurse in Cadiz, and the		„ „ Puerta Real . .	41
Parish outside the walls . . .	298	„ „ Xerez de la Fron-	
Out at nurse in San Fernando . .	67	tera . . .	2
„ „ Chicklana . .	120	„ „ Higuarita . .	1
„ „ Conil . . .	63	„ „ Rota . . .	1
„ „ Viger . . .	35		
„ „ Medina Sidonia . .	34	Total	711

Return of the State of the Establishment for Poor Widows (Casa de Viudas), founded by Señor Juan Flagela, from the year 1827 to 1838 inclusive, shewing the Annual Entrances, Departures, Deaths, and Numbers remaining at the close of each Year.

Years.	Entered.	Departed.	Dead.	Remaining	Years.	Entered.	Departed.	Dead.	Remaining.
1827	1	..	1	47	1833	3	1*	3	47
1828	2	..	2	47	1834	..	..	..	47
1829	..	..	..	47	1835	1	..	2	46
1830	4	..	5	47	1836	5	..	4	47
1831	2	..	1	47	1837	2	..	5	47
1832	1	..	..	48	1838	..	..	..	47

* Removed to the Hospital.

From information supplied by the chapter of the cathedral, who are the chief patrons of the establishment, it appears that the average expenses for the last five years have been 22,604 reals (about £226), arising from rents and other sources supplied by the founder, Don Juan Clat ó Flagela. The endowments of the various charitable establishments being insufficient for the demands upon them, recourse is had to various means to procure aid, and the following sketch of some of the extraordinary receipts and disbursements for 1837 will shew what these are:—Legacies, 11,100 reals; voluntary monthly subscriptions by the parishes, 26,365 reals; collected by the aged men of the hospicio, who went round with begging-boxes to the houses and shops, 2,614 reals; anonymous subscriptions, 2,224 reals; product of two *amateur* plays, 5,698 reals; product of Paul and his company, their feats of horsemanship, 1,500 reals; product of the sale of water from three cisterns, obtained by benevolent individuals, 5,995 reals; from Señor Placido Garcia, 544 reals; total, 56,042 reals. Disbursements: fees to medical men during the influenza, 7,873 reals; surgeons for bleeding, 677 reals; medicines, 10,355 reals; assistance given in money to the poor for food in the different parishes, 30,419 reals; balance due for advances, 1,759 reals; carriage of sick to the hospitals, &c. &c., 2,877 reals; in the hands of the parochial committees, 2,113 reals: total, 56,074

reals. Besides patients received into the hospitals, or assisted at the doors, 1,703 patients in four parishes had medical aid given to them in their homes: the numbers assisted in Santa Cruz were not known. It is evident the funds, both permanent and casual for the sick and poor, are quite unequal to the constant demands upon them, for Cadiz swarms with beggars and miserable objects in a state of physical suffering. In spite of this poverty of means I must nevertheless bear my unhesitating testimony to the efficient state of the hospitals; to their remarkable cleanliness and their excellent ventilation; which, however, is much promoted by the magnitude and loftiness of the wards.

Return of the Number of Head of Oxen, Sheep, Goats, and Hogs, Killed in the Government Slaughter-house in Cadiz, from 1833 to 1837 inclusive.

Years.	Head of Cattle.	Sheep and Goats.	Hogs.
1833	7,832	1,802	1,819
1834	8,024	1,006	2,299
1835	7,647	2,094	2,688
1836	8,117	3,479	2,943
1837	8,311	2,753	3,119
Total . .	39,931	11,134	12,868
Annual average for 5 Years	7,986	2,226	2,573

Note.—It is necessary to state, that in the number of head of cattle are included calves, which may amount to between 350 and 400 annually.

Each weighing about		lbs.
7,636 small bullocks,	80 stone of 8 lbs., 640 lbs.	4,887,040
350 ,, calves,	18 ,, 144 ,,	50,400
2,226 ,, sheep,	8 ,, 64 ,,	142,464
2,573 fat hogs,	25 ,, 200 ,,	514,600

5,594,504

Deducting from this amount the fresh meat
annually consumed by an English and French
ship-of-war, each of 190 men, constantly lying
in the Bay 138,700

There remain. . . 5,455,804

Supposed to be consumed by 58,525 inhabitants, giving $93\frac{1}{2}$ lbs. annually per head, or daily a fraction more than 4 ozs.: deducting, however, the consumption of the shipping constantly in the harbour, and the weight of bone, it may well be doubted whether the inhabitants of Cadiz average a daily consumption of 2 ounces each; but as about 25 per cent. are children, who do not eat butchers' meat, the remaining portion may consume from $2\frac{1}{2}$ to 3 ounces each, per diem. It has been asked, for what useful purpose returns similar to the present are sought for by the statist, and we have on this occasion a happy illustration of their utility. It has been found that a greater mortality prevails in Cadiz than in any other European town, and in searching for causes for so unexpected an event, one of the first suggesting itself would be the quantity and quality of the food of the people; and without such a return as the present, the search after truth would be stopped at the very threshold.

Daily Wages of Labour at Cadiz.—The following are the wages absolutely paid by the Bishop of Cadiz to his workmen employed upon the cathedral, and may, therefore, be looked upon as correct types of the value of the labour of the different classes:—

	JANUARY, 1838.											
	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.
Stonemasons . . .	27	15	..	..	38	13	27	12	27	11	25	7
Masons . . .	78	12	..	..	..	..	..	..	..	..	..	..
Carpenters . . .	10	12	27	8	..	..	..	..	..	..	..	..
Painters . . .	20	8	..	..	..	..	..	..	..	..	..	..
Day Labourers (Peones)	324	6	27	4	77	3	48	2	..	..	..	..

	FEBRUARY.								APRIL.							
	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.	Numbers.	Reals each.
Stonemasons . . .	25	14	41	10	20	8	18	4	..	..	28	15	28	12	25	8
Masons . . .	69	12	6	8	..	..	..	..	..	..	34	12	29	8	..	..
Carpenters . . .	12	12	6	8	..	..	..	..	..	..	15	12	22	8	..	..
Painters . . .	6	8	18	7	..	..	..	..	..	..	..	..	..	..	..	..
Day Labourers (Peones)	35	7	225	6	24	4	72	3	49	2	24	7	303	6	125	43

Note.—The real is $2\frac{1}{2}d.$ English, and there are $8\frac{1}{2}$ quartos in a real.

Sawyers work by measure, and in January were paid 5 quartos for sawing a yard (vara) of one kind of pine wood, and 3 quartos for another sort. For cedar (cedro) 21 quartos per yard, and for a yard of caoba (mahogany) 5 reals.

Independently of the daily wages of stonemasons, for laborious or delicate work, contracts are made; and I observed that a workman was paid 40 reals per yard for $8\frac{1}{2}$ yards of the cornice of the chief altar in the cathedral.

From the above table, it will be perceived that the best stonemasons received only 15 reals, or $37\frac{1}{2}d.$ ($3s. 6\frac{1}{2}d.$) English, per diem, and that the lowest grade received only 3 reals, or $7\frac{1}{2}d.$, per diem. The most expert bricklayer was paid 12 reals, or $30d.$, daily, and the least expert 20d.

The wages of carpenters were precisely the same. The highest wages paid to a painter were 20d., and the lowest $17\frac{1}{2}d.$ Some very few of the day labourers received as much as 7 reals ($17\frac{1}{2}d.$) each per diem; but the great mass appear to have been paid 6 reals ($15d.$) each daily; while very many received only 2 reals ($5d.$).

The cabmasters give to their men, who attend to and drive a cab and horse, 4 reals ($10d.$) daily.

To estimate the value of the above wages, it is necessary to state the price of bread and meat in Cadiz; and, from the high rate of these necessaries, it will be seen that the condition of the operative classes is even worse than these low wages would seem to indicate.

There are six classes of bread in Cadiz; viz., at 18, 20, 22, 24, 26, and 28 quartos the hogaza, or loaf of 3 lb. avoirdupois. There are 8½ quartos in the real; so that the quarto is worth about $\frac{5}{100}$ of a halfpenny, and the lowest price bread was rather more than 7 farthings English per lb. avoirdupois. Good beef 51 quartos for 32 ozs., or 7½d. English per lb. avoirdupois: inferior beef 38 quartos per 32 ozs., or 5½d. per lb. Pork dearer than beef. Common fowls 2s. to 2s. 1d. each. Salt butter, first quality, for the tables of the gentry, 80 quartos, 23½d. per lb. Common Flemish butter 44 quartos, 18d.: fresh butter is unknown. A hare 68 quartos, or 1s. 8d. Fish is tolerably abundant, and is proportionally cheap in relation to other food. Milk is too scarce and dear for common consumption.

COMMERCE—IMPORTS FOR 1837.

Importations of Colonial Produce from Havannah into Cadiz during 1837.

	Cases of Sugar.	Arrobas of Coffee.	Segars, Thousands.	Tobacco in Leaf, lbs.	Skins of Treacle.	Skins of Honey.	Arrobas of Wax.	Pipes of Rum.
January .	7,884	180,092	70,332½	31,800	3,198	113	2,975	90
February .	16,040	171,019	13,256½	85,905	6,050	219	1,606	82
March .	26,536	196,529	10,472	98,598	6,701	19	503	193
April .	36,707	179,785	8,351	69,480	3,079	30	3,942	55
May .	89,707	111,184	11,839	63,526	4,001	6	1,988	155
June .	43,071	38,475½	8,291	48,201	5,370	49	2,144	246
July .	46,624	124,632½	10,405½	43,136	3,187	..	2,295	256
August .	24,295½	122,501½	9,371½	129,140	2,950	40	6,296	396
September .	17,141	60,306½	12,342	167,042	3,120	106	1,241	235
October .	18,856	67,707	18,928	138,914	2,810	479	5,509	298
November .	21,811	111,311	17,567½	194,163	3,479	60	2,421	166
December .	8,997	106,346	12,647	126,280	1,044	258	3,585	224
Total .	221,655½	1,409,789	143,704½	1,196,185	43,378	1,379	36,414	2,497
English	2,844,060½	227,272½	..	10,680½	20,098	640½	8,221	..
	156,534,774	36,654,514	143,704,500	1,196,185	2,250,446	71,708	920,764	314,622

Note.—Each case of sugar contains 18 arrobas, each of 26 lbs. English; the skins of treacle and honey each 2 arrobas of ditto. Pipe of 117 gallons Spanish is equal to 126 gallons English wine measure. The Spanish quintal of 100 lbs. is equal to 101½ lbs. English.

EXPORTS.

Sherry Wines Exported from Xerez and Port St. Mary for the Years 1835, 1836, and 1837.

BY WHOM.	1835	1836	1837	BY WHOM.	1835	1836	1837
	Butts.	Butts.	Butts.		Butts.	Butts.	Butts.
X. William Oldham .	2,243½	2,255	1,428	X. Dama de Goni .	579½	710½	615
X. Peter Domecq .	2,212	3,026½	2,003	X. Domecq & Sons .	569½	836½	563
X. Belgbeder & Co. .	1,469½	1,602½	1,194	P. J. Cassasus .	563	572½	237
P. J. W. Burdon .	1,392	1,875½	1,787	P. J. Mousley .	475½	650	192
X. Gordon & Co. .	1,220½	1,155½	775	P. R. Sorila .	450½	212	..
P. Manl M. de Mora .	1,185½	1,458½	1,293	X. Rivero, Sons .	360	386½	309
X. Patrick Garvey .	1,180½	1,757½	1,225	P. Widow Victoria	329½	487½	249
X. Haurie, Nephews .	1,100½	1,760½	1,556	& Sons .	..	..	..
X. Widow of R. Sheil	1,027½	605	658	P. Lopez Martinez .	325½	408½	155
P. J. M. Pico .	1,017½	1,222½	1,154	Sundry Xerez .	568½	5106½	2666
X. Pemarten & Co. .	978½	1,153½	1,019	Shippers St. Mary .	1823	2262½	3582
P. Duff Gordon & Co. .	914½	1,041½	..	P. T. Osborne .	..	..	1,019
X. Dantes & Soles .	843½	961½	593	P. I. Ximenez .	..	..	833
P. R. Crowley & Heirs	599½	406	114				
				Total .	28,567½	31,954½	25,268

Note.—X and P, preceding the names, mean that the firms respectively live at Xerez and Port St. Mary.

Annual average 28,627 butts; and, as each butt contains 600 bottles of wine, the annual export is 17,176,200 bottles, or 1,431,350 dozens.

There are more than 19 exporting-houses from Xerez, and more than 24 from Port St. Mary, as I have the names of 43 firms engaged in the wine trade; and there are many others at both places whose names do not appear in the returns, from the comparatively small way in which they are engaged: such persons are included under the head of "Sundry Shippers." Sherry wines have a very great range of prices—one house at Port St. Mary ships them at 14*l.*, 18*l.*, 22*l.*, 28*l.*, 34*l.*, 40*l.*, 45*l.*, 52*l.*, and 58*l.* per butt: some houses do not ship wines under 31*l.* per butt; and the highest price for good wines appears to be 58*l.* per butt; but when going to choice wines, such as Amontillado, the price runs from 70*l.* to 90*l.* per butt: Paxarete (a sweet wine), from 60*l.* to 70*l.* per butt: but some very old Sherry and Paxarete is valued at 100*l.* per butt. Most of the wine shipped from Xerez and Port St. Mary (particularly from the latter place) is of a low quality and cheap price; to approximate to the truth, therefore, in an *estimate* of the value of the wine trade, it is necessary to take a figure lower than the average prices of different houses. Using as a calculating element the average of the nine prices at which a house in Port St. Mary sells its wines, it would give 34*l.* 11*s.* per butt; but even if 30*l.* per butt be used to determine the value of the wine exports, I fear it would be too high; however, using this sum as the average price per butt, the annual average value for the last three years is 858,840*l.* Much of the wine exported goes to America; and as it is evident the total amount is below the consumption of England alone, much spurious wine must be drank as Sherry. It is needless to speak of the European trade of Cadiz: the impolitic, and indeed absurd, imposts upon European manufactures, occasions nearly the whole of this trade to be contraband. The following extracts from a petition to the Cortes throws some light upon the state of Cadiz: there is no doubt great exaggeration, particularly with respect to population, but the picture is a melancholy one.

Extract from a Petition to the Congress, from the Provincial Deputation of Cadiz, in the Tiempo, 2nd March, 1838, illustrative of the Commercial State of that Town.

After admitting the necessity for making every possible sacrifice in the present times, they state the utter impossibility of Cadiz and its provinces raising 13 million reals, and Santander 800,000 reals, towards the forced war contribution of 200 millions, which had been allotted to it, for the following reasons:—"The province comprises only 24 towns and villages. Cadiz was rich—was the centre and depositum of the gold of the new world: but all that is passed. Calamities, wars, loss of the Americas, and strangers profiting by its misfortunes, have banished opulence from Cadiz. A belief of its wealth remains, and it is burthened with 13 millions, while Seville has only 6, and Malaga 2,850,000 reals. In a state of decadence, and without commerce, Cadiz cannot raise her quota. Even in the sole remaining article of traffic (wine), in Jerex and Puerta de St. Maria, no few respectable speculators are ruined: 16½ millions by the law of the Cortes is assigned upon the territorial and pecuniary wealth of Cadiz; and as a specimen of this territorial wealth, the Deputation feel themselves bound to call the attention of the Cortes to the fact, that in consequence of the emigration of its inhabitants to more fortunate countries, one-third of the

houses are vacant ; that the rents (alquiladas) are one-fifth, or at most one-fourth of what they were ; that, in San Fernando, rents do not exist, the occupier not being able to pay, and the owner not able to obtain his remedies ; and in short, in the former flourishing town of Puerto Real, since the war of independence, there are not any houses that are not in ruins !”

(Signed)

In the same paper there is a petition to the queen, beautifully written and signed by the prioresses (preladas) of 18 suppressed convents in Seville, stating that their properties have been seized, and that they are left to starve. “ They implore your royal clemency to preserve them from terrible hunger, which threatens all, and has already carried several victims to the grave. Yes, madam, several nuns wanting those aids indispensable to the feeble, the sickly, and the aged, have perished: they could not pass days without food.

“ We are Spaniards, and though we confess ourselves bound to contribute to the necessities of the state, we consider that the law preserves to us our rights, as it does to other classes. From all has been asked in proportion to their means ; but from us is taken *all, even to our bread*, and almost our water. And what crime have we committed in our innocent asylums that this difference is made? Time was when these habits were borne by the Urracas, the Berenguelas, and the Isabels ; and the garments treated with contempt in the present times were looked upon by those gone by as symbols of honesty and modesty, suitable to our sex and condition.”

(Signed by 18 prioresses.)

METEOROLOGY.

The very considerable length to which this paper has run disables me from entering at large into the meteorology of Cadiz, of which I have minute daily details for a twelvemonth : but as it is of importance to invalids, I shall give the monthly averages of the barometer and thermometer, both of which instruments were freely exposed to the open air in the shade. The observations were not taken by myself, but were printed daily in “ El Tiempo” newspaper.

	THERMOMETER (Fah.)						BAROMETER (Eng.)					
	Sunrise.		12 o'clock.		Sunset.		Sunrise.		12 o'clock.		Sunset.	
1837, June . .	66°	75'	80°	25'	71°	50'	29°	90'	29°	94'	29°	92'
„ July . .	70	..	82	..	75	50	29	94	29	97	29	93
„ August . .	70	50	83	50	76	75	29	97	29	99	29	95
„ September . .	65	25	74	50	71	50	29	95	29	98	29	95
„ October . .	60	75	70	..	67	25	30	09	30	11	30	09
„ November . .	52	..	61	..	59	25	30	05	30	06	30	04
„ December . .	53	50	59	..	58	..	30	06	30	09	30	07
1838, January . .	52	25	56	50	55	25	29	79	29	81	29	79
„ February . .	53	75	58	..	57	25	29	83	29	87	29	84
„ March . .	54	..	62	75	59	75	30	04	30	05	30	03
„ April . .	54	50	64	50	62	..	29	91	29	93	29	90
„ May . .	59	50	69	..	65	75	29	90	29	92	29	92
Year . . .	59	40	68	42	64	98	29	95	29	98	29	95

The foregoing table testifies to the remarkable equableness of the climate of Cadiz, both in relation to temperature and pressure of the atmosphere. Although the last winter was so remarkably severe in England, the thermometer, on one solitary occasion only (the 18th January, 1838), fell to 41° Fahrenheit, at sunrise. Frost and snow, of course, were not seen. The highest indication of the thermometer was on the 21st August, 1837, when, at noon, it rose to 90° 50'. By a comparison of the meteorology with the table of mortality for 1837-8, it will be seen that the greatest number of deaths occurred in the hottest months, June, July, and August, and when the atmosphere was at about a mean pressure; and that, on the whole, the healthiest periods were when the barometer stood highest and the thermometer lowest.

The following return does not appertain exclusively to the statistics of Cadiz; but so little is known of the general state of Spain, that it cannot fail to be of interest, and even to be useful. It is the first authentic account I have met with in recent times of the exact population of Spain:—

Return of the Number of Senators and Deputies (Proprietary and Supplemental) to the Cortes, from all Spain, corresponding to the Population of the Provinces, which appeared in the Royal Decree of the 3rd of August, 1837.

PROVINCES.	Population.	Senators.	Proprietary Deputies.	Supplemental Deputies.	Total Deputies.	PROVINCES.	Population.	Senators.	Proprietary Deputies.	Supplemental Deputies.	Total Deputies.
Alava . . .	67,593	1	1	1	2	Lerida . . .	151,322	2	3	2	5
Albacete . . .	180,763	2	4	2	6	Logrono . . .	147,718	2	3	2	5
Alicante . . .	318,444	4	6	3	9	Lugo . . .	357,272	4	7	4	11
Almeria . . .	234,789	3	5	3	8	Madrid . . .	369,126	4	7	4	11
Avila . . .	137,903	2	3	2	5	Malaga . . .	338,442	4	7	4	11
Badajoz . . .	316,622	4	6	3	9	Murcia . . .	380,694	3	6	3	9
Balears, Islas	229,197	3	5	3	8	Navarra . . .	221,728	3	4	2	6
Barcelona . . .	442,373	5	9	5	14	Orense . . .	319,038	4	6	3	9
Burgos . . .	224,407	3	4	2	6	Oviedo . . .	434,635	5	9	5	14
Caceres . . .	231,398	3	5	3	8	Palencia . . .	148,491	2	3	2	5
Cadiz . . .	324,703	4	6	3	9	Pontevedra . . .	360,002	4	7	4	11
Canarias, Islas	199,950	2	4	2	6	Salamanca . . .	210,314	2	4	2	6
Castellon de } la Plana }	199,090	2	4	2	6	Santander . . .	166,730	2	3	2	5
Ciudad Real . . .	277,788	3	6	3	9	Segovia . . .	184,854	2	3	2	5
Cordoba . . .	315,459	4	6	3	9	Sevilla . . .	367,303	4	7	4	11
Coruna . . .	435,670	5	9	5	14	Soria . . .	115,619	1	2	1	3
Cuenca . . .	224,522	3	5	3	8	Tarragona . . .	223,477	3	5	3	8
Gerona . . .	214,150	3	4	2	6	Teruel . . .	214,988	3	4	2	6
Granada . . .	376,974	4	7	4	11	Toledo . . .	276,952	3	6	3	9
Guedalajara . . .	159,044	2	3	2	5	Valencia . . .	451,685	5	9	5	14
Guipuzcoa . . .	104,481	1	2	1	3	Valladolid . . .	184,647	2	4	2	6
Huelva . . .	133,470	2	3	2	5	Viscaya . . .	111,426	1	2	1	3
Huesca . . .	214,874	3	4	2	6	Zamora . . .	159,425	2	3	2	5
Jaen . . .	266,919	3	5	3	8	Zaragoza . . .	304,823	4	6	3	9
Leon . . .	267,428	3	5	3	8	Total . . .	12,168,572	154	241	134	375

I collected numerous details respecting the value and rental of landed and house-property in Andalusia, vineyards, olive-groves, gardens, and arable land, as indicated by the public sales of national and private property; but my limits do not permit of my entering upon these subjects.

Educational, Criminal, and Social Statistics of Newcastle-upon-Tyne.

Drawn up by WILLIAM CARGILL, Esq., and a Committee of the Educational Society of Newcastle.

[Read before the Statistical Section of the British Association, 21st August, 1838.]

IN proceeding to lay before the Section the result of the enquiries instituted into the Education and General Condition of the Inhabitants of Newcastle, by the Committee of the Educational Society, it may be proper to explain that the extreme difficulty experienced by the members and agents engaged in the work has been the cause of our dispensing with information on many valuable points, in order to secure accuracy in the whole of those which we should submit to you.

The object of the Committee is more to produce correct than copious data on a subject on which each individual is left to form his own conclusions solely from the facts stated; it has therefore been judged desirable to omit entirely those points on which the information obtained was too sparing to admit of being classified in anything like a degree approaching to certainty; preferring, in a word, accuracy to completeness, in circumstances where both could not be combined. We may inform you that the enquiries were commenced in the month of January last, and have been prosecuted, with little intermission, up to the 18th of the present month, when they were terminated. The information was taken, in three parishes, by the agent of the Society, in conjunction with two others, selected for the purpose, under the superintendence of two members of the Committee for each; and one parish (St. Nicholas) was especially undertaken by our member, Mr. Joseph Watson, who, with two overseers, visited every school, and many of the private houses and rooms inhabited by the poorer classes. As a means of testing the accuracy of the whole, after it should be condensed into the abstract which we are going to lay before you, as well as to observe the general condition of the inhabitants, our agent, accompanied by a friend, visited every house, garret, and cellar inhabited by separate families in the *whole parish* of All Saints, as also a portion of the township of Byker, containing 4000 inhabitants. Exact information of the number of children able to read and write was in this manner obtained by him, which we shall also detail to you.

Much care has been used by the Committee in obtaining the present population of Newcastle; for many circumstances have contributed, within the last four years, to cause a greater increase of inhabitants than the ordinary rate would produce.

The total Population, according to the census taken in 1831, including the townships of Byker, Elswick, and Westgate, being within the municipal boundary, was found to be 51,719

Allowing the common rate of increase of 2 per cent. per annum, and after examining with minuteness the causes occasioning an unusual influx of persons into the town, we estimate the increase to be 12,281, making the whole population, exclusive of Gateshead, . . . 64,000

The ratio shown by the analysis of the Newcastle Population Return of 1831 gives the number of children between the ages of 5 and 15, say 25 per cent. 16,000

The result of our investigation shews the number of Children between those ages, receiving instruction of some kind, in day schools, Sunday schools, and evening schools together, to be 8,239*

By which it appears the number of Children between the ages of 5 and 15 receiving no instruction whatever is 7,761

Or nearly the same deficiency as appeared in Liverpool, according to the paper read there to the Association last year.

The total number of day schools is found to be	123
" " Teachers of day schools	178
" " Sunday schools	38
" " Children attending Sunday schools	5053
" " Sunday schools belonging to the Established Church	10
" " Sunday schools belonging to Dissenters	28
" " Children attending Sunday schools belonging to the Established Church	1315
" " Children attending Sunday schools belonging to Dissenters	3743
" " Schools supported by Endowment	6
" " " " Endowment and Subscription together	2
" " Schools supported by Subscription only	39
" " " " Subscription and Payments of Scholars together	12
" " Schools supported by payments of Scholars only	107
Number of schools in which Reading only is taught	29
" " Reading and Writing only are taught	11
" " Reading, Writing, and Arithmetic are taught	28
" " Reading, Writing, Arithmetic, and other things are taught	93

* It is necessary to remark that it has not been found possible to ascertain with accuracy the number of children attending Sunday schools only and the number attending day schools only. In the total number of 8239 receiving instruction a considerable proportion are known to attend Sunday schools alone; but, as the separate proportions have not been ascertained, no opinion is given as to their relative amount.

Some remarks were made in the Section upon this statement of the number of children at school, as exhibiting too unfavourable a view of the amount of education afforded to the youth of Newcastle. The two following facts tend to refute this opinion, and to afford reason for supposing that the number of children not receiving education is actually greater than represented in this report. First, the children attending Sunday as well as day schools are counted twice over, as has just been stated; and it cannot be doubted that out of so large a number as 5058 Sunday scholars, constituting five-eighths of the whole number of children at school, a considerable portion attend day schools likewise. In the parishes of Westminster, examined and reported upon by the Statistical Society of London, that portion amounts to 66 per cent. of the whole number of Sunday scholars, and in York to 75 per cent.; therefore it will probably be found necessary, on this ground, to make a considerable deduction from the total number of scholars above stated. There exists, secondly, another large class which ought not to be included in the calculation of scholars between 5 and 15 years of age, namely, those under 5 years, who were stated to amount to above 1100, but who are enumerated with the other children, and thereby diminish, in a corresponding degree, the number of children between those ages who are estimated to be receiving no education. These two circumstances combined afford strong reason for supposing that the report gives a favourable, rather than a prejudicial, view of the present amount of education in Newcastle.—Ed.

All Saints parish, visited by our agent, Mr. Frater, produced the following results :—

The Population in 1831 was 17,063, and may be now estimated at 20,000.

The number of children between the age of 3 and

15 found to be contained in the parish . . . 4352 or 21½ per cent.

Of which were found able to read . . . 3007 „ 69 „

„ „ „ read and write . . . 1935 „ 44½ „

„ „ „ unable to read . . . 1345 „ 31 „

„ „ „ to write . . . 2417 „ 55½ „

Equal diligence was used to endeavour to ascertain the number of adults able to read and write, but without success. In making such enquiry our agent was universally regarded as interfering with what they thought he had no concern, and they gave answers which he knew, in the majority of cases, to be false. Out of 1800 adults questioned, in one district, only 198 confessed that they were unable to read or write. In another district only 214, out of 1892, acknowledged similar ignorance, and in a third, 45 out of 703.

The number of births registered from the 1st July, 1837, to the 1st March, 1838, in the same district, within which all of these enquiries were made, are found to be 243; the information was given by 168 persons who made marks, and by 75 who wrote their names, which, in many cases, were not legible.

Of 400 births and 380 deaths registered in St. Andrew's parish, from from the 1st July, 1837, to the 1st July, 1838, the information was given by 496 individuals who signed their names, and by 284 who made their mark. It is necessary to observe that St. Andrew's is the parish containing the greatest number of inhabitants of the wealthier, and the smallest proportion of persons of the poorer class, and that many of the latter never register at all. It is also common for persons unable to write, and who may have occasion to register, to get a neighbour who can write, to give the information for him, and sign the registrar's book. In the parishes of St. John and St. Nicholas the number of informants of births from the 3d January to the 30th June, 1838, was 226, of whom 165 signed their names, and 61 made marks. It therefore appears that, by the returns from each of the four districts of the town, the total number who signed is 736; the total number who made their mark, 513; making the proportion able to write 59 per cent, and the proportion unable to write 41.

It is worthy of remark that, in the practice of binding men, as is customary every year in collieries, very few sign their names; but it would not be fair to infer from that circumstance that they are unable to write. They usually make their marks in order to save time, and because, from their hands being stiff with work, writing is rendered a slow process.

It appears from the enquiries of our agent that the number of children who can read and write in the parish of All Saints is 44½ per cent., and the number of children found to be receiving education in the whole of the town is 51½, while, according to the returns of the registrar, the parties entering their signature in the registers can write in the proportion of 59 per cent. This superiority on the part of the adults may probably arise from the circumstance of the greatest portion of children leaving school before they attain the age of 12 years, in consequence of

the abundance of employment for children of that age, and the same fact may partly account for the number of children between 5 and 15 who are not attending any school being so great.*

State of the Schools.

Notwithstanding the humiliating result which our investigation has made apparent, leaving nearly one-half of the children of the whole town, between the ages of 5 and 15, receiving no instruction either real or nominal, it is our painful duty to caution you against believing that the whole of the proportion ascertained to be receiving some kind of instruction in schools are really receiving what can be denominated "education." Many of the rooms which are called schools, and are included as such in the foregoing tables, are merely receptacles for children that cannot be conveniently taken care of at home, and where instruction is scarcely even expected or wished for by the parents. In numbers of instances children attend these schools for a fortnight, or a week, and often only for a few days, and cease attendance altogether, without even learning their letters; and a succession of such attenders as these make the number of children who are stated in the table as receiving instruction appear greater than it would be were the enquiry confined to the number which actually received instruction. In one case the honest teacher of a pretty large school (or more properly receptacle for children) told our agent that if she managed to get the children to remain for one week, which was not often done, they took good care that they never appeared again; and he could very easily believe this to be true, for the bed-room used as the school was so filthy, dark, ill-ventilated, and generally miserable, that it was with difficulty he could remain to procure the needful information.

It is scarcely possible to convey an idea of the general state of the schools in figures, or in any other way than from the impression of the agents and the members of the committee who visited them; but we may confine ourselves to saying that they found many of the dame schools more clean and orderly than they expected, considering the dirt and disorder that surrounded them; many, however, are close, filthy, ill-regulated, and the teachers utterly unqualified for either teaching or keeping the children in order; and a still greater proportion of boys' schools were found in this state—the teachers being often about as ignorant as the scholars, and so badly paid as to be unable to procure

* In one extensive and well-conducted colliery, in which about 400 hands are employed, there are from 40 to 50 boys between 12 and 15 years of age, and 15 or 16 from 8 to 12, who go down the pit at 4 o'clock in the morning, and remain there for 12 hours. The proportion of boys in some collieries is stated to be much greater. About half an hour is lost in going to and from work. On returning home the boys have their meal, play about for an hour or two, and then go to bed, rising again in time to re-commence work at the same hour. The viewer, or manager of this colliery stated that he avoided as much as possible employing children under 10 years of age, but in some collieries they go down as early as 6 or 7 years old. Their work, it is true, is light, consisting of opening and shutting the traps, or doors in the galleries, driving horses, while the stronger lads are employed in rolling the loaded corves from the workings to the crane; but it is obvious that, after a stay of 12 hours in the pit, there can be little opportunity, and it can scarcely be desired, to confine them within doors, even for the purpose of instruction.—*Ed.*

books, even when they knew how to use them—many of them being unable to earn more than 6s., 8s., and 10s. per week; and in one instance the teacher (whose qualifications were superior to many) never averaged more than 1s. 6d. per week, and was, of course, obliged to be assisted by charity. Some of the teachers, whose qualifications were found to be respectable, stated, that the desire for education on the part both of parents and children was so small, that many of them would not attend any school if they were offered instruction and books for nothing. Others stated that the remuneration of teachers was such as to offer no temptation to pious, intelligent, well-educated young men to enter upon the duties of teaching, it being quite insufficient to enable them to earn a competent livelihood. It is necessary to understand that this account of the condition of the schools is confined to those situate in the parts of the town inhabited by the lower classes; and, although it is manifestly undesirable to particularise schools, either well or ill conducted, yet we deem it right to signalise the benefit which has been conferred upon the people of the district alluded to by the Royal Jubilee School, the largest in the town, being attended by 500 scholars.

The following is a comparison of the proportion of educated to uneducated in Newcastle, Manchester, Salford, Bury, York, and Liverpool, according to the Reports of the Manchester Statistical Society:—

Number of Children between the Ages of 5 and 15 receiving no Instruction.

In Bury (Lancashire) in 1835, 12½ per cent. of the whole.	
„ Salford in 1835, 22½	„
„ Manchester . . . in 1834, 25½	„
„ York in 1837, 33	„
„ Newcastle . . . in 1838, 48½	„
„ Liverpool . . . in 1837, 52½	„

Statistics of Crime, 1836-1838.

There have been committed to the Prisons at Newcastle (exclusive of Debtors) since the 12th October, 1836, up to and inclusive of 24th April, 1838, 1264 persons, of which number were		Males.	Females.	Total.
		75	507*	126
Of whom were under the age of 12		11	11	22
Of the age of 12 and under 14.		19	6	25
„ 14 „ 17.		65	26	91
„ 17 „ 21.		185	107	292
„ 21 „ 30.		272	215	487
„ 30 and upwards		205	142	347
		<hr/> 757	<hr/> 507	<hr/> 1264
Of whom can neither read or write		243	204	447
„ can read only.		108	125	233
„ read or write, or both imperfectly .		377	177	554
„ read and write well		29	1	30
		<hr/> 757	<hr/> 507	<hr/> 1264

* With respect to the large proportion which the females in this table bear to the males, see the Editor's Note on the Criminal Returns of Newcastle, at page 325.

Result of the Observation of our Agents of the General Condition, Rate of Wages, &c. of the Lower Classes, in the Parish of All Saints.

We have already stated that our agents visited every place of abode in the parish of All Saints, the population of which we estimate at 20,000, as also the greatest part of the township of Byker, containing a population of about 6000. His object was chiefly to enquire into the number of children in the parish able to read and write, and to ascertain the causes that prevented those who should prove unable to do so from having been sent to school and instructed. We have already given the detailed result of the enquiries into the number of children ascertained to be able to read and write according to the replies of the parents and friends; but, with regard to the causes alleged for the number found to be untaught, we find it unnecessary to reduce them to figures, in consequence of the replies to such queries being almost invariably the same. In some few instances, the reasons assigned for not sending children to school were, that the elder ones were kept at home to take care of the younger; but the great majority of persons pleaded the hardship of paying 1d., 2d., or 3d. per week, for what they did not deem of any material consequence—indeed, poverty in some shape or other, was almost invariably the cause assigned: but our agent has deemed it his duty to explain to the Committee that he could seldom place any faith in the replies, as the appearance of the dwellings, as well as his knowledge in particular cases, warranted him very frequently in concluding that the means were ample in instances where such reasons were alleged.

Although the general condition of the dwelling-places and the inhabitants cannot be said to form any part of educational statistics, yet it may not be uninteresting to allude to the observations of our agent on the state of the humbler population, revealed to him by the laborious process of visiting the places of abode in so large a district. In many parts of the parish he found the dwellings close, dirty, and miserable, without the semblance of order or comfort, whole families often inhabiting a single room, and living in an atmosphere of a nature to him totally unendurable. The rooms were generally good, and the houses well built, and capable of being made quite comfortable by the smallest attention to order, cleanliness, and ventilation; but the inhabitants did not appear to consider any such improvement in their dwellings of importance. It was common to find ashes and rubbish of other description deposited in a corner on the stairs, and removed once a week when there was a sufficient accumulation to block up the passage. In that part of the district called Sandgate he found the condition of the persons inhabiting the houses in the lanes the most appalling. In his Report to the Committee he says, "the mind cannot picture a state of greater destitution and misery than what appear in many of these houses; and in Pandon their condition seems not much better." Yet it is worthy of remark, that he did not find one single instance of a cellar being used as a place of abode. He frequently visited these houses during meal-times, and generally found the articles of food to be good and abundant: but in this, as in every other respect, neither order nor system was observed; one child would be found in possession of a whole loaf, another of some fish, and a third of something else, and all eating unseparingly, as well as often wasting a good deal. Our

agent was struck with the fact that in this particular district, amidst the greatest general wretchedness, there was less rudeness and suspicion, more intelligence and respect for exertions to do good, and he altogether met with more facility and good-will in the prosecution of his enquiries, than in any other district he visited.

The inhabitants of Sandgate consist in part of rope-makers, blacksmiths, glass-makers, &c., but chiefly of keelmen, boatmen, and what are termed "jobbing" labourers. The rate of wages earned by rope-makers averages one guinea per week, and steady men that work over-hours earn 25s. and 26s. per week. Common labourers in rope-manufactories receive on an average 18s. per week. The average rate of wages to blacksmiths may be estimated at a guinea per week, but at the present time they earn from 23s. to 24s. per week. Skilful glass-makers earn from 40s. to 60s. per week, and common labourers employed in the glass-works are paid at the rate of 12s. to 18s. per week. The wages earned by keelmen are higher than almost any other class of men in Newcastle. Those that are steady and in full work earn fully 40s. per week each, and even the more improvident can earn with ease 30s. At the present time keelmen may be constantly employed if they choose, and for some time the chief difficulty has been on the part of the employers, who generally have more work to offer than there are keelmen able or willing to undertake it. This only applies to those keelmen residing in the town (the quarters I have been alluding to), and not to those engaged in carrying coals, who live chiefly about the collieries, and earn considerably less, but whose employment is more regular. The "jobbing" labourers, when employed by the day, never receive less than 3s. 6d. per day, but more generally work by the piece, when they earn 5s., 6s., and 8s. per day, by continuing their labour (which they can only do in summer) during 15 or 16 hours in the day.

In concluding this statement, we beg to apologise to the Section for having made so much of the information *general*, as also for having introduced subjects not strictly connected with the statistics of education, to which our investigations were first intended to be limited; but, during the progress of our enquiries, we found the opportunities of collecting additional valuable information so easy, in fact we may say they unavoidably presented themselves to us, that we did not fail to turn them to the best possible account; and although our investigation into the general condition of the districts described was not so minute as to enable us to reduce the points to figures, the subject being of itself of a nature to render it difficult to form an accurate tabulated statement; yet we shall not consider the information to be useless if it contribute to convey an accurate impression of the subjects it is intended to describe.

We may mention that the borough of Gateshead, containing about 19,000 inhabitants, although virtually forming a part of Newcastle, has not been included in these investigations, because our time for collecting the facts was too limited to execute more than we have done with the precision to which it was our chief aim to attain.

An Account of the Changes and Present Condition of the Population of New Zealand. By Saxe Bannister, Esq.

[Read before the Statistical Section of the British Association, 22nd August, 1838.]

SINCE the general peace, British emigration has increased at the following rate:—

In the first five years after the peace the *average* number of emigrants to all parts of the world was annually 5000. In the five years ending 1831 it was annually 20,000. In the seven years ending 1837 it was annually 70,000.* This enormous increase is likely to become far greater, in consequence of the favourable reception of the new colonizing principle of selling new lands, and applying the price to sending out emigrants.

The influence of this increased emigration on the millions of barbarous natives in those new lands is of the greatest importance. No human power can stop the white people; but it is conceived that they may be wisely guided, so as to become blessings to the aborigines, instead of a scourge and a curse.

The case of New Zealand, as exhibited in the following facts, is an important illustration of all the points connected with the subject:—

The New Zealand group consists of the Northern Island, the Southern Island, Stewart's Island, with some smaller islands. Its situation is between 34° and 48° of south latitude, and 167° and 178° of east longitude. Its exact extent is uncertain; according to the account put forth by the New Zealand Association, it is about 95,000 square miles, or 60 millions of acres; according to evidence given before the House of Lords in 1838, it is about 100,000 square miles.

Population.—The population consists of, 1st, native tribes; 2nd, white residents; 3rd, white visitors, or transient population; and 4th, mixed race.

1st, with respect to the *Native Tribes*.—In 1769-1773 the population of the whole group was estimated at 100,000, according to the testimony of Dr. Reinhold Forster, contained in his *Observations* made during a Voyage round the World (1778, 4to. pp. 224). "The southern Isle of New Zealand has very few inhabitants; but the northernmost, according to the accounts we had from Captain Cook, and from what we saw in some few places as we passed by, is much better peopled—nay, in some spots very populous; therefore, allowing 100,000 souls to both isles, we rather think our estimate to fall short of the true population." Mr. Montefiore, in his evidence given before the House of Lords in the year 1838, says, with reference to the present time, "I have heard the population stated at 500,000 to 1,000,000, in the whole country, but I think this is impossible;" and Mr. Coates, the Secretary to the Church Missionary Society, in his evidence before the same Committee, states that "there are above 200,000 in the whole country, viz., 105,000 in the northern island, and 95,000 in the southern." Mr. Polack, in his evidence on the same occasion, states that "there are 5 natives to 3 square miles of land, or 130,000 inhabitants in the whole country;" and, in his recent work on New Zealand (vol. ii. p. 343), he says that "the native population is about 150,000, or 3 persons to

* Report of the Emigration Commissioners, 1838.

about 2 square miles." The Rev. W. Gate states that there are about 180,000 in the northern island, and adds, "I have seen the greater proportion of them."

The native classes are the chiefs, the common free people, and the slaves, or prisoners of war. The chiefs are about one-tenth part of the whole. A considerable number of the natives are absent from New Zealand in foreign ships, or in visiting foreign countries.

2nd, *White Residents*.—There are from 1800 to 2000 British subjects in New Zealand, of whom 158 are runaway convicts or sailors.^b On the Southern Island there have been Europeans during the last 35 years, principally sealers and whalers :^c 200 or 300 English are settled in Queen Charlotte's Sound in Cook's Straits. There is another English settlement in Stewart's Island, and another in Dusky Bay.^d The first religious mission was established in 1814, when some runaway convicts were found in the North Island. Traders had already bartered European goods for flax.^e In a petition addressed to King William IV. in 1837, by 193 persons, including 24 Wesleyan and Church missionaries, it is stated, that "Several of your Majesty's subjects have resided in New Zealand for more than 20 years, since which their numbers have accumulated to more than 500 north of the river Thames alone. The frequent arrival of persons from England and the adjacent colonies, is a fruitful source of augmentation, and there is reason to anticipate a rapidly rising colony of British subjects here." It was given in evidence before the House of Lords, that "European settlers have increased wonderfully of late ;"^f and Mr. Polack, in his work on New Zealand, states that there are "150 white residents in the Bay of Islands,"^g and that there are 3 or 4 whites with every tribe, the chiefs not suffering them to be taken.

3rd, *White Visitors, or Transient Population*.—

1642, Tasman, Dutch, mutual hostilities between natives and visitors.

October, 1769, Cook, English, ditto.

December, 1769, Surville, French, ditto.

1772, Marion, French, ditto.

1791, Vancouver, English.

From the time of Vancouver's visit to the present day (1791-1838) an uninterrupted intercourse has been kept up with New Zealand, some thousands of vessels of every description having touched on every part of the coast, from the North Cape to the land farthest south.^h

Northern Island.—The Bay of Islands was principally preferred after 1791.ⁱ

One thousand European and American sailors have been seen at one time in the Bay of Islands.^j

In 1836 the following ships visited the Bay of Islands :—

^b Evidence before House of Commons' Aborigines Committee, 1836, p. 143.

^c Evidence before the House of Lords, p. 81, Mr. Polack.

^d Ibid., p. 146, Mr. Baring.

^e Polack's New Zealand, vol. i. pp. 325, 326.

^f Ibid., p. 81.

^g Ibid., p. 150.

^h Ibid., vol. i. p. 47.

ⁱ Ibid., p. 49.

^j Evidence before the House of Lords, 1838.

British,—Whalers, 64; Ships of War, 2; Traders, 27	93
American, „ 49	„ 5	54
French, „ 3	3
Tahitian,	Traders, 1	1

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Southern Island.—In 1836 from 12 to 36 ships were seen at a time in the Southern Islands; and 300 sailors have been known to “run” at a time there.¹

4th, *The Mixed Race.*—A considerable population is springing up from the marriages, or from the illicit intercourse of white settlers and visitors with New Zealanders.

The white inhabitants and visitors are chiefly English, with many Americans, and some few French and other Europeans.

The classes are—1st, official persons, as the English and other agents, consuls, and occasionally the military and navy; 2nd, the missionaries dependent on societies in Europe; 3rd, traders; 4th, sailors; 5th, convicts; and, 6th, mechanics and labourers.

The whole of these people do some good, and all have done some evil, in New Zealand; and the particular influence of the different classes upon the character of the natives is the most interesting circumstance in the history of New Zealand. What that influence has hitherto been will be easily inferred from the facts brought forward under the several heads in this statement.

White Visitors, or Transient Population.—The circumstances attending the transient visits of Europeans to New Zealand have not differed from those which have attended their occasional visits to all savage countries. Want of caution, and want of consideration for the rights of the natives have led to frequent massacres on both sides. But the New Zealanders have generally evinced a good disposition towards their visitors; and there is less blood shed at present between the two parties than was common in former years, from the times of Tasman, Cook, and the rest. The killing of a white man by a New Zealander is now more rare than the murder of white men by white men in the country.

The French.—The chief peculiarity in New Zealand, with regard to white people, is the *asserted* dislike of the French by the natives, which involves circumstances of the greatest importance, and in which there is a mystery proper to be cleared up.

It is certain that one of the earliest visits to New Zealand by a French ship occurred in 1772, the commander being M. Marion du Fresne; and that, from some unknown cause, his friendly intercourse with the natives was suddenly changed into hostility, which ended in the killing of M. Marion and many of his officers by the natives, and in the French taking extremely sanguinary revenge.

It is asserted that, in consequence of this unhappy event, the New Zealanders have a peculiar dislike to the French. But this is in the highest degree improbable. There is, perhaps, no example of a lasting feeling of vengeance in any savage people for the civilized nations that has injured them. Their placability in this respect is one of their remarkable characteristics; and it is altogether distinct from their revenge-

^k Polack's New Zealand, p. 252.

¹ Account of New Zealand by the New Zealand Association, p. 347.

ful disposition in individual cases. It is indispensable to ascertain the whole truth in this matter.

Captain La Place, a distinguished French officer, at this moment commanding a discovery ship in the South Seas, was in the Bay of Islands in 1830, with another ship of war, the *Favorite*. In his account of his first voyage, published by the French government in 1835, he refers to the point in question as follows:—"The missionaries of the Bay of Islands exhibit neither the charity which all the ministers of religion profess, nor the generosity for which their countrymen are remarkable towards strangers. My offers and my solicitations to obtain from them some refreshments for our sick were alike vain; and I soon convinced myself that these preachers of the Gospel, suspecting me of political purposes, endeavoured to disturb the harmony that existed between me and the natives, by insinuating to them that I meant to take possession of the bay, and revenge the massacre of Marion."^a

Mr. Polack states this case in the following terms: "On the arrival of Captain La Place in the French corvette '*La Favorite*,' in October, 1831, a report was industriously circulated in Sydney, and the Bay of Islands, that this enterprising commander intended to take possession of the country in the name of his august master, Louis Philippe. This fabulous report occasioned a few of the native chiefs to hold conferences, which resulted in their requesting the missionaries to address a letter to his late Majesty William IV. at their dictation." In this letter is the following passage:—

"We hear that the tribe of MARION is at hand coming to take away our land. We therefore pray thee to become our guardian, and the friend of these islands, lest the tearing of other tribes should come near to us, and lest strangers should come to take away our land."^b

With reference to this petition, Mr. Coates, in his evidence before the House of Lords, says—

"These chiefs, who say in their letter to the King that the tribe of MARION is at hand, mean the French. Why they are called the tribe of Marion I do not know."^c

Captain Fitzroy's evidence is to the same effect.

"There is a serious difficulty in the way of Frenchmen settling in New Zealand. There is a strong prejudice against them, which originated with the massacre many years ago, when some of MARION's crew were murdered, and their death was revenged by others of the French ship's company."^d

The question is, whether the dislike of the New Zealanders to the French is the genuine consequence of the case of Marion, or whether any of the English have excited this dislike. It is certainly not the way to civilize savages to act wrong towards our civilized friends.

Depopulation.—Mr. Coates, the secretary to the Church Missionary Society, states, in his evidence before the House of Lords, that "the missionaries think the native population is decreasing." He adds, "I doubt it."^e

The government agent in New Zealand asserts, in a dispatch, that "at the Missionary Institutions the native children are dying extensively."^f

^a *Voyage de la Favorite*, tome iv. p. 35., cited in Bannister's *British Colonization and Coloured Tribes*, 1833, p. 182.

^b Polack's *New Zealand*, vol. ii. p. 218. ^c *Ibid.*, p. 273. ^d *Ibid.*, p. 175.

^e *Ibid.*, pp. 180, 181.

^f *House of Commons' Papers for 1837.*

The following causes of depopulation are recounted by a recent writer: 1. The wars from 1821 to 1830, which were occasioned by Strongi, who visited England. 2. Want of occupation, which prompts war. 3. Superstition, which forbids food being given to the sick, and so kills "thousands." 4. Bewitching kills "thousands." 5. The degraded state of the women, and polygamy. 6. Suicides. 7. Diseases.*

It was stated in evidence before the House of Lords, that the population is even now but "a remnant of what it was in the memory of some European residents."† And Captain Fitzroy testifies that the general opinion in 1835 in New Zealand was, that the population was decreasing fast."

Diseases.—Captain Cook says, in 1769, "These people enjoy perfect and uninterrupted health. We never saw a single person who appeared to have any bodily complaint; nor the slightest eruption on the skin, nor marks of an eruption."‡

Dr. Forster expatiates on the general healthiness of the New Zealanders; but he thinks the venereal disease was among them before our arrival.⁴

The venereal disease now is so common, that a medical witness has stated to the House of Lords that 49 women in 50 have it (Evidence, p. 20). The natives attribute it to the Europeans (p. 32). Other diseases are common and fatal. Scrofula is prevalent (ib. 20). The influenza has been fatal to many (ib. 199). Cutting timber for the Europeans has introduced a new disease (ib. 119, 183).

Native Laws and Usages.—"The chiefs exercise a sovereign authority in the administration of justice after their fashion.

"I have heard them, and seen them sit together, and form a council."⁵

"Each chief legislates for his own territory. The customs and laws appear to be very much alike, and they seem to be remarkably tenacious of them. They initiate their children into them in very early days. It is very amusing to see them teaching their children. They will teach them as if they were old persons. In return, they hear them as patiently as if they were old people speaking, allowing the child to ask questions.

"They appear to have councils, or annual meetings, or feasts. Chiefs of various tribes meet together, and speak at great length, sometimes on war, and sometimes on all sorts of subjects.

"They have their assistants to sit with them as reporters, to assist them to remember their speech. If they forget any points they refer to these friends, of whom some attend to one thing, and some to another."⁶

In the petition to the King of England before quoted, it is asserted that "the chiefs are incapable of exercising the duties of an independent government;" and Mr. Polack, in his account of New Zealand, states that "the law of force has hitherto ruled the country."⁷

Character and Capabilities of the Natives; Industry; Food.—In Cook's time, the natives are reported by Dr. Forster to have been "hos-

* Polack, 2nd vol. pp. 331, 335, 344. † Ibid., p. 183. ‡ Ibid., p. 340.

⁴ First Voyage, Hawkesworth, vol. iii. p. 460. ⁵ Observations, p. 482.

⁶ Mr. Montefiore's Evidence before the House of Lords, p. 65.

⁷ Mr. Watkins's Evidence before the House of Lords, pp. 27, 29, 30.

⁸ Vol. ii. p. 431.

pitiable, sincere, and generous friends; intrepid and bold warriors; implacable and cruel enemies; carrying their thirst of revenge even to such a degree of inhumanity as to feast upon their unfortunate prisoners. They are generally men of sound understanding, and have taste and genius; as proofs of which may be mentioned their curious carvings and other manufactures.”^c

“It appears to me that the New Zealanders must live under perpetual apprehension of being destroyed by each other. . . . Notwithstanding this divided and hostile state, travelling strangers (New Zealanders), who come with no ill design, are well received and entertained during their stay. Thus it is that a trade for green talc is carried on throughout the whole northern island. They seem to be perfectly satisfied with the little knowledge they are masters of, without attempting in the least to improve it.”^d

“Their master-piece is carving, which is found on the most trifling things; and, in particular, the heads of their canoes are sometimes ornamented with it in such a manner as not only shews much design, but is also an example of their great labour and patience in execution. Their cordage for fishing-lines is equal in strength and evenness to that used by us; and their nets are not at all inferior. But what must cost them more labour than any other article is the making the tools we have mentioned.”^e

“Their principles of honesty and public faith are noble and romantic.”^f

“They treat their women in the most oppressive manner, and the parents and relations frequently sell to strangers the favour of females against their will.”^g

“They build some of their houses with elegance. Their dress shelters them against the weather.”^h

“They think themselves happy—nay, happier than the best regulated nations, and every individual of them is so perfectly contented with his condition, that not even a wish is left in his breast for the least alteration.

“None of the New Zealanders, upon the offer being made to them, showed any desire to go with us to our own country.”ⁱ

“In 1769, Mr. Banks saw some of their plantations, near Poverty Bay, south of the Thames, in the northern island, where the ground was as well broken and tilled as even in the gardens of the most curious people among us. In these spots were sweet potatoes, colos, or eddas, well known and much esteemed in the East and West Indies, and some gourds. The sweet potatoes were planted in small hills; some ranged in rows, and others in quincunx; all laid by a line with the greatest regularity. These plantations were of different extent, from 1 or 2 acres to 10; taken together there were about 150 acres in cultivation in the whole bay, though we never saw 100 people. Each district was

^c Dr. J. R. Forster's *Observations during a Voyage round the World, 1787*, 4to. 237.

^d Cook's *Third Voyage*, 4to. vol. i. pp. 137–140.

^e Dr. Anderson's *Observations on Cook's Third Voyage*, vol. i. p. 160.

^f Dr. Forster, p. 321.

^g *Ibid.*, pp. 321, 322.

^h *Ibid.*, p. 323.

ⁱ *Ibid.*, p. 302.

fenced in, generally with reeds, placed so closely that there was scarcely room for a mouse to creep through.”^j

“In the Southern Island the food consisted of fish and fern-roots, for we saw no cultivated ground. In comparison with the inhabitants of other parts, they are poor. They had scarcely anything but fish to dispose of.”^k

“In Cook’s time they feasted on their prisoners. . . . ‘I asked,’ says Dr. Forster, ‘whether they eat the flesh of such of their friends as had been killed in war, but whose bodies were saved from falling into the enemy’s hands.’ They seemed surprised at the question, which they answered in the negative, expressing some abhorrence at the very idea. Their common mode of disposing of their dead is by depositing the bodies in the earth.”^l

“Their cannibalism has been represented by the ingenious Dr. Hawkesworth (vol. iii. b. ii. ch. 9) as introduced among the New Zealanders by hunger, but I dissent from his opinion. I did not find them ever so much distressed. They have prudence enough to provide stores of all kinds, in proper season. When they catch more fish than they can eat, they carefully dry and lay them up. Their women go frequently up the hills, which are covered to an immense extent with fern, and dig up the roots for dry food, when fish and other eatables cannot be had. We saw great quantities of these provisions in their huts, and frequently found them employed in preparing both fish and fern-roots for the bad season.”^m

Mr. Polack gives the following testimony of their condition in 1836:—

“Raper, a chief of my party, strongly insisted on the services of the Europeans to the natives by a thousand acts, instancing several inventions that had been introduced to save labour, as the chisel, the adze, the axe, the tomahawk, which has superseded the ancient stone instruments, continually subject to be broken. These facts were answered by a murmur from the audience, expressive that they were invaluable. Raper then instanced the introduction of the pig, corn, and potatoes, and other esteemed edibles presented to the country by the white men.”ⁿ

The same author says—“I spent the twilight in viewing the plantations, laid out in the neatest order. Few farms in civilized countries could be planted with greater attention to neatness. The potatoes and kumeras were planted in rows of small hills; between them the large broad lotus-leaf of the farinaceous taro appears; large patches of the Indian corn grew in neat order to the right; and the land was cleared of weeds, piled above the walls of stone collected from the ground, which I calculated was 20 acres. There were besides, cabbages, shallots, garlick, turnips, and the kaupakeha, a sort of yam, but superior.” . . . “These were Heathen plantations.”^o

“There are districts of clever men, such as the East Cape; they make handsome mats, and are peculiarly clever in carving.”^p

^j Cook’s First Voyage, Hawkesworth, vol. ii. p. 313.

^k Ibid., vol. ii. p. 405.

^l Cook’s Third Voyage, 4to. vol. i. pp. 137, 138.

^m Dr. Forster, p. 325.

ⁿ Polack’s Seven Years in New Zealand, 1838, vol. i. p. 178.

^o Ibid., p. 181.

^p House of Lords’ Evidence, p. 90.

"A native, who has taken the English name of Bailey, is the chief mate of a vessel of 300 tons. He would have been captain if our navigation laws allowed it."¹

"The native New Zealanders are capable of rising above the common seamen. They shew a wish to make progress. They are better men than the ordinary crews of our whalers."²

"The New Zealanders expect payment for everything you take from them. They always honestly discharge the credit given them. Some traders have large quantities of stores in various parts. The ships have come to induce the natives to sell the flax ordered for other parties, but nothing on earth would induce them to sell it to the third parties."³

"I agreed myself with three natives in 1835; they appeared thoroughly to understand the nature of the agreement. They entered into my service, as they called it, and worked 8 hours a day."⁴

"There is no indisposition in the natives to work for a compensation. They take the whales; they mix in the boats, and are good whalers."⁵

"There are, at present (1830 to 1837), sailing in the Pacific, ships with cargoes worth 20,000*l.* steered by New Zealanders day and night."⁶

"Where the New Zealanders have had an opportunity of being instructed they have shewn great ability. Their farms have astonished every stranger."⁷

"The natives have a very great desire to be taught to read and write. They worked for me in clearing the ground, sawing timber, gardening, fencing, &c.; we paid them monthly with duck trousers, or shirts, or blankets; with potatoes for their daily food, and occasionally flour or tobacco, slates and pencils, knives or razors, and other small articles."⁸

In a missionary letter laid before the House of Lords, dated 1st December, 1837, it is stated that—"The natives have this year fine crops at Waimate—40 acres of wheat. Very few of them, however, will be efficient farmers. It requires too much outlay, and too much hard work and perseverance. It is however a pleasing sight to see them growing sufficient to help them when sick."⁹

"The disposition to active and steady industry among the natives goes to a very limited extent, and is found almost exclusively, if not altogether, among those natives who have been converted to Christianity."¹⁰

"Under the influence of the missionaries, and in that comparatively advanced state of civilization to which they are brought through the agency of the missionaries, anything like a habit of steady industry is not to be found to any considerable extent."¹¹

PRODUCTION—EXPORTS.

Mr. Montefiore states, with reference to the natives south of the Thames, and remote from the missionaries, that "they cultivate un-

¹ Evidence before the House of Lords, p. 91.

² *Ibid.*, p. 75, Mr. Enderby.

³ *Ibid.*, p. 59, Mr. Montefiore.

⁴ *Ibid.*, Mr. Flatt, p. 34.

⁵ *Ibid.*, Mr. Montefiore, p. 168.

⁶ *Ibid.*, Mr. Polack, p. 79.

⁷ *Ibid.*, p. 79.

⁸ *Ibid.*, p. 34.

⁹ Mr. Flatt's Evidence, 1834-37, p. 34.

¹⁰ Evidence, p. 197.

¹¹ Mr. Coate's Evidence, p. 181.

¹² *Ibid.*, p. 249.

commonly well; they fence in their land; their potatoes are cultivated better than by many of the settlers in New South Wales. *Those I saw were heathens.* They build fine canoes. . . . Last year we had several thousand bushels of maize from Poverty Bay.”*

“I see that, in 1837, my firm in Sydney, being the agents for parties who are cultivating in Poverty Bay, received large quantities of maize, wheat, and potatoes, flax, pork, hogs’ lard, whale-bone, oil, and every thing in which the country abounds.”†

“The export of flax has decreased rapidly in the last 8 years in consequence of the wars of the tribes. In 1831 1000 tons were cleared from New South Wales, and in 1837 scarcely 100 tons.”‡

“It is asserted that the trade of New Zealand now amounts to 4,500,000*l.* per annum.”§

“New Zealanders now visit all parts of the world, instead of being unwilling, as in Cook’s time, to go abroad.”

The Missionaries in New Zealand.—Two Protestant societies only have missions in New Zealand; the Church Missionaries, founded in 1814, and the Wesleyans, founded in 1823. In the present year a Roman Catholic Mission has been founded by the French.

It is admitted by almost all eye-witnesses, that the results of missionary labours have been highly beneficial to the natives. In the occupations of peace, in agriculture, and the mechanical arts, and even in literature, their example and precepts have unquestionably improved large bodies of the New Zealanders of all ages—and their intervention and advice are believed to have greatly lessened the horrors of the native wars.

The success of these missions has been unequal.

“The Church missionaries had, by the last accounts, 100 communicants, although established in 1823 and with 25 labourers; the Wesleyans 700, after only 10 years with 6 labourers.”||

This witness considered the difference to be attributable “very materially” to the alleged fact of the Church missionaries having become large landed proprietors.¶ “The evidence against the Church missionaries is strong; although all missionaries are prohibited strictly from seeking ‘gain’ and entering on ‘commercial speculations.’”‡

“It is a notorious fact, that the missionaries do hold very large quantities of land in New Zealand. I have seen letters from them to their friends in New South Wales inviting them to come there.”§

“Our missionaries have very briefly referred to the fact, of the Church missionaries having purchased land, but no information has been communicated as to the extent of land they have purchased. They have referred to the fact, that objections have been raised by the natives against their brethren of the Church Society, on account of the land which some of them have purchased, merely referring to it in passing, regretting the fact.”||

There is further evidence to the same effect. Mr. Flatt states that

* Evidence, pp. 61, 64.

† Ibid., p. 60.

‡ Polack’s *New Zealand*, vol. ii. p. 287.

§ Bannister’s *British Colonization and Native Tribes*, p. 191.

¶ Evidence before the House of Lords, p. 123.

‡ Ibid., p. 268.

§ Ibid., p. 59, Mr. Montefiore.

|| Ibid., p. 310, Mr. Beecham, Secretary of the Wesleyan Missionary Society.

"Mr. J. Davis, a catechist, has bought land adjoining the Society's farm;"ⁿ that "the members belonging to the Church Missionary Society possess much land. None have purchased in so large quantities as they;"^o and that "these purchases commenced more than 6 years ago."^p

The Wesleyans are stated by the same witness not to be holders of lands like the Church Missionary Society.^q

The secretary of the Church Missionary Society explains these transactions by suggesting that the missionaries have made the purchases of the lands in trust for the natives.^r

So Mr. Garratt, the Chancery barrister, who is an active member of the Church Missionary Society's committee, conjectures that these lands were bought by the missionaries as trustees.^s

A missionary of this Society, who was examined before the Aborigines Committee of the House of Commons in 1836, stated that "his Society possessed land; but, as individuals, the missionaries were not allowed by the Society to possess any. In most instances, the land of the Society had been purchased at the request of the natives."^t

The principles of the Wesleyans strictly enjoin their missionaries to keep "at the remotest distance all temptations to a secular, or mercenary temper,"^u and it is understood that they have lately dismissed a leading member of their New Zealand mission, who disobeyed that part of the rule which concerned personal profit, viz., the purchase of land.

Its other branch, *secular* concerns, both the Wesleyan Society and the Church Missionary Society, have declared it to be their determination to abandon in New Zealand, by making their missionaries political agents there.

Their present political and secular occupations, and their disposition to continue them, have been stated as follows to the House of Lords: "The missionaries are invariably called forward to assist in all disputes, such as trespasses."^v

Captain Fitzroy says, "At present every thing is submitted to the missionaries. An example occurred to myself in the case of some masters of merchantmen coming to ask for my interference. I went with them to Mr. Busby, thinking that he, as British resident, was the person to interfere for his own countrymen; but he told me he could do nothing, and that there was no alternative but to go to the missionaries. This was the case in which an attack was about to be commenced by the natives on two British ships. I went to the missionaries, who settled it at once in a satisfactory manner. In reply to the question, whether they would be willing to undertake such a duty not immediately connected with their professions, Captain Fitzroy says, "From what I saw of them, I should say that they would be quite willing to undertake any duty that might lead to the good of the natives."^w

The operations of the missionaries have been somewhat impeded by the constant disputes among the Europeans, in which they are judges.^x "The missionaries are treated as chiefs. The natives consider they

ⁿ Evidence before the House of Lords, p. 38, Mr. Beecham.

^o Ibid., pp. 87, 88.

^p Ibid., p. 38.

^q Ibid., p. 47.

^r Ibid., p. 261.

^s Ibid., p. 286.

^t House of Commons' Paper, *Sess.* 1836, No. 22, p. 189.

^u Ibid., p. 297.

^v Evidence, p. 16, Mr. Watkins.

^w Ibid., p. 170.

^x Ibid., p. 169.

can call upon the English government, and send for soldiers at any time. Indeed they hold out a slight idea they can send home in case of any emergency. For instance, they say, if you will not do so and so, we will write home, and have power here to set it to rights; as much as to say, government will take cognizance of any injury committed on our property.”*

“The congregations were not increasing when I was there. The missionaries attributed it to the great difficulty of dealing with their own countrymen; and that in consequence of almost their whole time being taken up in settling disputes, they had little or none left for instruction, particularly for instruction in the schools. Not a day passed but a message was sent to the missionaries from one or another, to settle some trifling disputes. All the disputes in the neighbourhood came into their hands.” There were not many children in the schools in consequence of the secular occupations of the teachers,^b and the instruction of the children devolves wholly on the wives of the missionaries.”*

The whole question is involved in the following questions and answers, which place the imprudence of employing missionaries for these purposes in a striking light:—

In the Aborigines Committee of the House of Commons, in 1836, a missionary from New Zealand was asked whether it would not be advantageous to the success of the mission, that the missionaries should have a political power vested in them by the government of this country? To this question he replied—“Certainly not. They might be called sometimes to interfere, when it would very much thwart their efforts by the decision which in justice they would be compelled to give. It might prevent their usefulness as ministers of the gospel. I would not accept it myself.”^d

In the New Zealand Committee of the House of Lords of this year, the Secretary of the Church Missionary Society was asked—“Is it your opinion that the missionary societies can be used, when the country increases in population and in industry, for purposes of civil administration and government, without losing all their power for the object for which they were originally intended?—Up to what point in civilization the agents of the Missionary Society can be advantageously employed, is perhaps a problem that has not yet been solved. We have recognized a principle of this kind in dealing with countries in rather a different state from New Zealand, where the operations of the missionaries have arrived at that point at which the system of the Church of England could be advantageously introduced, with dioceses and parishes, in the same way in which the affairs of the Church of England are administered here, that in that case the period for the exertions of the Missionary Society has ceased. But with reference to such a country as New Zealand, I apprehend that period must at present be distant, and that therefore the probability is, that the sphere of exertions of the missionaries will continue a considerable time to come, if not prematurely broken in upon by the introduction of colonies. At the same time I say very distinctly, that the Church Missionary Society have the strongest objection to missionaries being employed in any way beyond

* Evidence, p. 32, Mr. Watkins.

^b Ibid., p. 168.

^c Ibid., p. 47.

* Ibid., p. 168.

^d Ibid., p. 201.

their proper province as religious teachers and instructors ; and that whatever assistance they may have hitherto given to Mr. Busby, or which they might give to any other authority, of whatever description in the island, would be of the most limited extent, and only as a temporary arrangement, but certainly not with a view of that forming any integral part of our operations."

"But if the government of this country is to become a native government, under missionary regulation or dictation, would not that bring your missionaries always into action in all the civil affairs and business of the country?—Certainly. For my own part I never contemplated the missionaries being placed in the way of dictation, or of direction to the natives of New Zealand, in the event of such a process as that which the question supposes ; but I presume that the missionaries in New Zealand, as the missionaries in some other districts of the South Seas have done, would, when the chiefs found themselves in want of the means of administering a salutary government, give them counsel and information on that or any other point affecting their interests, which might enable them to carry their own views into effect ; but beyond that point I do not anticipate that the agency of the missionaries will ever be employed under any circumstances, and I conceive they would lose their distinctive character by any such employment."

"If it should appear that already the missionaries have been mixed up with more dealings in land than the Society at home would think justifiable, would not that rather prove to you the danger to the religious objects you have in view, of mixing up the missionaries more than they are now mixed up with the affairs of government administration?—The only difficulty I feel in answering that question is the doubt I entertain of the fact which it supposes. I should do injustice to the missionaries, as well as express an opinion against my own judgment, if I were to admit that they have so acted : I certainly do not think they have so acted. We have no reason to suppose so, except what has arisen out of those statements of Mr. Flatt."

"You doubt the facts ; but if those facts should turn out to be true, considering the very respectable men you have upon those stations, would it not rather confirm your belief of the danger of mixing up religious and civil duties in the same individuals?—I am bound to say that it would ; because, though I say it with much reluctance, yet should such turn out to be the fact, I certainly should regret that missionaries of the Church Missionary Society should have taken that course."*

LAND—NATIVE TITLE—PURCHASES BY WHITE PEOPLE.

"The lands are held among them by a sort of feudal tenure. No persons are in possession of it who are not chiefs ; and they are obliged to go to war with the chieftain. All have a share in the price when it is sold. The chieftain has, perhaps, no power over it, but he signs the title."†

"It is the native custom to fix on any part of the country and plant it. If they keep it that year it belongs to them ever after. It becomes their property."‡

* Evidence before the House of Lords ; Mr. Coates, Secretary to the Church Missionary Society, pp. 265, 266.

† Evidence before the House of Lords.

‡ Ibid., p. 40.

"When they sell any land the whole tribe must be present. But often that cannot be the case, for a great number of natives go away in English and American ships, and all who are within reach must be present and give their consent."^h

"The first purchase of land by Europeans was in 1815, for a missionary station: the price was 12 axes."ⁱ

The company of 1826 obtained 1,000,000 acres for about the value of 50*l*."^j

This purchase is respected to this day.

"The Kouri forests have become, for the most part, the property of Your Majesty's subjects."^k

"Land once purchased after the approved native method, is tabooed to the purchaser, and becomes his property. The native landholder, in demanding a price, generally reminds the buyer, in order to enhance the value, that the property is to descend to the children of the purchaser; that the articles given for it soon go, and nothing is left to the seller."^l

This is the common opinion; but recently a new view has been taken of this point of the alienation of the soil by the natives.

Captain Fitzroy, of the royal navy, has stated to the House of Lords that the sale of land to the missionaries is a sort of conditional sale:—"We sell them to you to hold as long as we shall permit you."^m

The secretary of the Wesleyans states on this point—"I rather lean to the conclusion, that the natives have no very distinct idea of the total alienation of their lands; but may cherish the notion of resuming them at some future period, under certain circumstances. But there is nothing in the history of our mission which would enable me to produce a fact in illustration."ⁿ

WARS—ARMS.

Wars, Arms.—In the account of Cook's third voyage, in 1773, it is stated that, "The weapons of the New Zealanders are spears from 5 to 30 feet long; patoas, or short clubs of 18 inches; and halberts, or long clubs of 5 or 6 feet long, and sometimes stones."^o

"The people of each village by turns appealed to me to destroy each other."^p

"Tringobooke, whom I met in my last voyage, had been killed 5 months ago, with about 70 persons of his tribe; and I could not learn that there now remained in the neighbourhood any tribe, whose number could secure to them a superiority over the rest."^q

The Rev. H. Williams, chairman of the Church Missionary Society, speaking of the year 1831, says, "Each boy at Touranga has 2 or 3 guns, and the men 10. I have not known of their going against any other tribes since their possessing the means of attack, but to act on the defensive."^r

"It is stated that in 1836 the New Zealanders are all armed. They get their fire-arms from the whale vessels and the traders in flax and

^h Evidence before the House of Lords, p. 172. ⁱ Ibid. ^j Ibid., Mr. Baring.

^k Petition of 193 British subjects to the King of England.

^l Polack's New Zealand, vol. ii. p. 202.

^m Evidence before the House of Lords, p. 174.

ⁿ Cook's Third Voyage, vol. i. p. 161.

^o Ibid., p. 131.

^p Polack, vol. ii. p. 44.

^q Ibid., p. 297.

^r Ibid., p. 124.

timber. I have seen the Bay of Islanders make a present of a thousand stand of arms to their enemies, the people of the south, after a war.”^a

“The British government, in trading with the native chiefs for spars or flax, has invariably supplied the people with arms and ammunition.”^b

“The result of the experiment of introducing fire-arms has been to preserve peace among the tribes. Many wars have been prevented, each party being supposed to be about equal in strength.”^c

In the last war at the Bay of Islands in 1837, some hundreds of thousands of balls were discharged, 3000 combatants being engaged on both sides, with little loss. On one day 5 were killed. Had the native fight of close quarters taken place, many hundreds must have been killed.^d

The missionaries often reconcile enemies, and prevent wars,^e while the Europeans too often excite them.^f

CRIMES COMMITTED IN NEW ZEALAND BY WHITES, AND PUNISHMENTS.

In some cases, the English keep faith with the natives, and in others they have treated them in the most barbarous manner possible.

In a great number of instances the natives have been overreached and cheated by the whites;^g and several instances are known of murders having been committed in New Zealand by Europeans.^h

“The captain of a ship imported corrosive sublimate into New Zealand for the purpose of teaching the natives to invite their enemies down as friends, and then to poison them.”ⁱ

Mr. Flatt states, that during the time he was at the Bay of Islands, two white people were murdered by whites.^j

On the 8th of December, 1837, a white was executed at Sydney for “stealing in a dwelling-house, at the Bay of Islands, on the 18th of June, 1837, and putting John Wright in bodily fear.”^k

This is the first instance of crime in New Zealand being punished in an English Court of Justice.

“The natives (in the north) never kill Europeans, to my knowledge. They are very tenacious of retaining them in their tribes, for the sake of the emolument they procure them. These men make their bargains with the masters of vessels, and get a higher price.”^l

RESULTS.

The results of the intercourse of Christians with the New Zealanders are both good and bad; and if the account were not to be taken in reference to a probable future state of the natives, it would be difficult to decide whether the good or the bad predominates. Diseases have increased fatally in consequence of that intercourse. Wars, although they are still attended by cannibalism, and the enslaving of prisoners, are probably less sanguinary than in former days. Comforts and conveniences of all kinds are increasing among the tribes; but spirituous

^a Evidence before House of Commons' Aborigines Committee, 1836, p. 190.

^b Polack's New Zealand, vol. ii. p. 43. ^c Ibid., p. 43. ^d Ibid., pp. 41, 42.

^e Evidence before the House of Lords, *passim*.

^f Evidence before the Aborigines Committee, p. 190, &c.

^g Evidence before the Committee on Aborigines, 1836, p. 188.

^h Ibid., p. 193.

ⁱ Ibid., p. 195.

^j Evidence before the House of Lords.

^k Government Order in Polack's New Zealand, vol. ii. p. 440.

^l Evidence before the House of Lords, p. 23.

liquors have been introduced to their great injury; and if they gain much from their more civilized customers and employers, they are parting with their lands in a way that does not produce sufficient equivalents to themselves.

Above all, the number of Europeans, both residents and visitors, is now so great in New Zealand that its present condition of anarchy has become intolerable; and if not soon remedied there must speedily arise the common result of the absence of good government—increasing parties and sanguinary feuds.

SCHEMES FOR THE FUTURE GOVERNMENT OF THE COUNTRY.

There is a strong opinion in all quarters that some regular government is the great want of New Zealand at this moment, and various schemes are now under discussion for the purpose of effecting a change.

1. The missionaries propose to govern the country through their influence over the chiefs; and by means of British ships of war constantly stationed in the New Zealand seas; with British resident diplomatic agents in the principal towns; and with judges sent periodically from Sydney.

“In this way it is expected to form a native government which shall ultimately become voluntarily incorporated with Great Britain.”^a

To facilitate the execution of this scheme the missionaries propose that the existing native laws shall be forthwith collected, and reduced into writing.

“This is a sort of combined operation of the influence of the government and the missionaries.”^b

This missionary scheme is founded on the belief that the British nation is incapable of reforming its wretched system of colonization, and that some interference with the independence of the natives is justifiable for their good.

2. A second scheme, laid before the government, and printed by the House of Commons, proposes to establish commercial factories only in various parts of New Zealand, supported by a few forts, and to confine the introduction of British authority and law to the circuit of the forts, under treaties with the tribes.

3. A third scheme is that of the New Zealand Association, which aims at reforming the existing system of British colonization, so as to enable the natives to amalgamate with well-governed settlers, under treaties with the tribes.

Both these schemes are founded upon the opinion that, by the law of nations, Great Britain has acquired a right in the soil of New Zealand as against all the world except the native tribes.

4. A fourth scheme is begun to be executed by the Baron de Thierry. It resembles the first scheme proposed by the missionaries, except the important point, of his substituting himself as the king and guide of the New Zealanders, by their consent, in the place of the British government.”^c

^a Evidence before the House of Lords, pp. 266, 275; Evidence before the Committee of the House of Commons on Aborigines, 1836, p. 513.

^b Evidence before the House of Lords.

^c *Ibid.*, and Mr. Polack's *New Zealand*.

Statistical Notice of the Asylum for the Blind in Newcastle-upon-Tyne. By the Rev. JOSEPH M'ALISTER.

[*Read before the Statistical Section of the British Association, 22d August, 1838.*]

IN the autumn of last year the attention of some benevolent individuals was particularly directed to the condition of the indigent blind in this town and in the adjacent counties. Subscriptions to a considerable amount were soon raised, sufficient to justify a committee in proceeding to some practical plan for aiding that unfortunate portion of the community. After the delays attendant on the drawing up of a code of laws and regulations, the present Institution was opened for the reception of inmates on the 28th of June last.

The objects of the subscribers to the asylum are, to afford to the indigent blind, religious, moral, and elementary instruction; to give employment to those who can work, and to teach the young such trades as are found suitable to their capacities. The building, at present occupied as an asylum, is situate in an enclosure in Spital, and answers very well as a temporary residence; but it is in contemplation by the public to have a more suitable building erected, as soon as a proper site and plan can be obtained. Upwards of £1100 have already been collected for this purpose.

The present master of the works at the asylum is Mr. Watson. The mistress is Miss Gallon, who has studied the plan of education pursued at the Glasgow asylum.

Number of blind entered on the books of the asylum is as follows:—

No. 1.—S. M., aged 55, a native of the county of Derry, Ireland; was two years at an asylum in Belfast; has resided in this town and neighbourhood for the last 20 years. He lost his sight when about 20 years of age; was taught to read in childhood. He weaves mats in the asylum, and receives on an average 1s. per day, whenever he works; he has also a little out-door employment. The material of his work is furnished, and the proceeds of his mats go to the funds of the establishment.

No. 2.—S. R., aged 34, a native of North Shields; born blind; was 4 years 9 months at Liverpool Asylum, where he learned to make baskets; has some taste for literature; and occasionally preaches in the Methodist connection. He is an inmate of the asylum, and receives 13s. per week, as a workman and as a teacher of his trade; he would like to hear readings from the periodicals; has never been instructed to read.

No. 3.—J. W., aged 14, is the pupil of S. R. above-mentioned; is learning to make baskets. He lost one eye at an early age in the measles; the other eye was destroyed by accident when 11 years old; was born in Newcastle, but of Irish extraction; was never at any other asylum; receives instruction daily in reading on Mr. Alston's improved system; makes considerable progress; he remembers the form of the alphabet easily, as he was taught to read before he became blind.

No. 4.—A. W., aged 23, a native of Newcastle; lodges with his aunt; comes to the asylum daily; lost his sight at 15 years of age; was taught to read in childhood; was 4 years at the Edinburgh Asylum; did not avail himself of the opportunity to learn Mr. Galt's system of reading; he found the angular letters so different from what he re-

membered of his alphabet that he could make little of them. He is at present engaged in making mattresses, and can also make baskets, and spin twine if occasion require. The material, cocoa-nut fibre, is furnished to him as mentioned above; he receives 8s. per week. He is a young man of good sense, and would like to have books read to him of an evening. He has a pretty clear notion of geography and numbers.

No. 5.—J. J., aged 15, born in Manchester; of Irish extraction; has resided for some years with his father in this town; can distinguish between light and darkness; but is exceedingly helpless, from the neglect of his education; he turns the wheel for a twine-spinner, and receives, for the present, 1s. per week.

No. 6.—J. S., aged 9; born blind; a native of Newcastle; can do no work; is a child of quick parts; the mistress has begun to give her daily instructions in reading, &c.

General Observations.—The Committee are making arrangements for the reception of other applicants for admission as speedily as their plans can be matured. The applications are numerous. The exact number of blind in this community has not been as yet ascertained by any statistical society: it is expected that this will become a subject of enquiry at no distant time. A private individual, who has devoted his services very much in behalf of the blind, has ascertained for me that, in one section of the suburbs, viz., the east district of the parish of All Saints, containing a population of about 9000, there are 21 blind persons. This, I believe, is more than double the proportion of the latest continental returns. It is to be observed, however, that this district is the locality of the lodging-houses of many of the wandering blind.

An important question with those who are directing attention to the intellectual culture of the blind is, what is the best alphabetic system which has been advanced for introducing this interesting class to the advantages of general literature.

There are at present various systems before the public: the angular characters of Mr. Gall of Edinburgh; the Roman characters improved by Mr. Alston of Glasgow; the stenographic forms of the late Mr. Lucas of Bristol; and two or three American modifications of Italics.

The advantages of an alphabet for the blind, resembling as nearly as possible the existing Roman letters, are beginning to be generally appreciated. It is to be desired that, ultimately, one uniform system of typography will be adopted in all asylums.

A respectable teacher in this town, Mr. D. Liddell, who was secretary to the present committee of the asylum for the blind in its early history, has been engaged for some time in giving the systems of Mr. Gall and Mr. Alston a fair trial, with a young girl of St. Andrew's poor-house, of promising talents. She has been receiving instructions for about a year, and can read pretty fluently according to either system. Although she was first introduced to Mr. Gall's angular characters, she found little difficulty in learning afterwards the Roman letters of Mr. Alston.

This is the system she may eventually pursue. I examined this child a few days ago, and was forcibly struck with the idea that, though it is a very practicable thing to teach the blind to read, still it is an exceedingly difficult task to teach them to think accurately. In every sen-

tence where a visible image is introduced, the meaning is more or less vitiated to those born blind; and the integrity of the mind, by constantly receiving what it cannot understand, is sadly endangered, unless a wise and assiduous mental culture, peculiarly adapted to those from whom knowledge at one entrance is "quite shut out," accompany every reading in a mixed literature. As yet little philosophy has been brought to bear practically on the education of the blind. There are some exceedingly valuable hints thrown out on this subject in a chapter devoted to "mutes and blind," in the "Retrospect of Western Travel."

If we should receive all that has been written on this subject by benevolent persons it would appear that we have already a literature for the blind, and the blind can now be taught to read and write in three or four lessons. It is much to be regretted that any exaggeration of this kind has ever been mixed up with so good a cause. Time is a necessary element in the education of the blind; and the teacher must be an individual well acquainted with the laws of the human mind. As yet the education of the blind is in the *letter*, the *spirit* is not developed. When we look at the admirable invention of raised tangible characters, we must confess that the *printer* has done his work nobly; but the *school-master* is not yet abroad among the blind. Seeing men have created a suitable literature for themselves; but, for the blind, this literature contains an element of excess which is fatal to intellectual unity.

We may, however, look forward to the time when many splendid results may be expected from the *special* and *philosophical* education of those faculties which the blind often possess in an eminent degree.

*A Statement of the Number of Seats in the several Churches and Chapels, distinguishing the several Religious Denominations to which they belong, within the Parish of All Saints, Newcastle-upon-Tyne, containing a Population of about 20,000 Inhabitants, in the Month of August, 1838.**

[Read before the Statistical Section of the British Association, 22nd August, 1838.]

Name.	Denomination.	No. of Seats.	
All Saints.	Establishment.	1,400	1,990 seats in the Established Church.
St. Ann's	Do.	500	
Trinity Chapel (Seamen)	Do.	90	
Roman Catholic	Roman Catholic	1,500	1,500
Quakers, or	Friends	500	500
Carlisle Street.	Presbyterian	700	1,600
Bethel.	Do.	400	
Wallkowl	Do.	500	
Sandgate	Independent	200	200
St. Peter's Quay	New Connection, Methodist	500	750
Ebenezer	Do. Do.	150	
Silver Street	Primitive Methodist	1,100	
Ballast Hills	Do. Do.	150	1,250
Gibson Street.	Wesleyan Association.	1,200	1,200
Forster Street	Glassites	120	120
New Road	Wesleyan Methodist	1,200	1,550
Stepney Bank	Do. Do.	200	
St. Lawrence	Do. Do.	150	
		10,560	

* This table was prepared in consequence of a discussion which arose in the Section, respecting the means of religious worship existing in the parish to which it relates.

4.—VENTILATION.	Greatest Length of Air Courses (f).	Velocity of Current.	5.—SCREENS.	Distance between Bars.	Small Coal by Screening.	Small Coal Consumed by Engines.	Small Coal left Unsiftable.	Small Coal left in Mine.
	A.	B.	C.	D.	E.	F.	G.	H.
	94 miles . . .	From 6 to 10 ft. per sec.	1 1/2 miles . . .	5 ft. per second in area of 30 feet.	From 4 to 12 1/2 feet per second.	15 feet per second in main current.		
	From 3 to 1 1/2 miles.							
	Mean length, 2 miles.							

8.—STRATA. (g)

	Lime-stone and Red Sand.	Depth from Surface to Main and Hutton Seams, in Fathoms.	Their Thicknesses of Clean Coal, in Feet.	Magnetic Direction and Angle of Dip.	Direction of Principal "Back," or "Clint," (d) and Headways.	Dykes—their Downcast and Magnetic Bearings.
A.	None.	95 and 160	4½ and 7 feet	S. 65 W.—1 in 13.	S. 12 E.	1 slip dyke, 58 fathoms; S.E. & W.
B.	30 fathoms of lime-stone, and 2 fathoms of sand.	265 to working seam. (i)	6 feet	S. 55 E.—1 in 54.	S. from 10 to 20 E.	Strata dislocated on W., N., & E.
C.	None.	96 and 130½	6½ and 4½ feet	S. 85 E.—1 in 23.	{ S. 14 E. High Main; S. 85 E. Hutton Seam.	{ Slip dyke, 21 fathoms N. S. 80½ E.
D.	96½ fathoms of lime-stone; no sand	109 and 147½	4½ and 4½ feet	E.—1 in 23.	{ S. 14 E. High Main; S. 85 E. Hutton Seam.	{ Several slip dykes, from 5 to 13 fathoms, mostly E. and W.
E.	+ 94 fathoms of lime-stone, and 18½ of yellow sand	148 and 174½	4½ and 4½ feet	E.—1 in 23.	Indistinct clestin Hutton Seam.	Inconsiderable.
F.	46 fathoms of lime-stone, and 5 fathoms of sand	140 and 180.	6½ and 4½ feet	E.—1 in 23.	S. 45 E.	Whin dyke, N. 80 W.
G.	46½ fathoms of lime-stone, and 8 fathoms of red sand-stone.	105½ and 152½	3½ and 4½ feet	E.—1 in 23.	Varies.	Largest slip dyke, 6 fathoms.
H.	25 fathoms of lime-stone, and 6 fathoms of red sand-stone.	101 and 145.	— 3½ feet	S.E.	S.E.	Slip dyke, 3½ fathoms.
I.	None.	50 and — feet	5 and — feet	S. 31 E.	S.E.	

• Hutton.

(a) The largest feeders are encountered in sinking the shafts, (amounting occasionally to 2,000 or 3,000 gallons per minute,) and are afterwards "stopped back" by a metal case ("tubbing") fitted to the shaft. The *lowest* feeders of the Monkwearmouth and Manor Wallsend collieries are *said*. Some copious and valuable salt springs also rise out of the sides of slip and whin dykes in other parts of the county.

(b) These are probably the most powerful non-condensing and condensing engines ever erected. There are, however, several single pumping engines in Cornwall, furnished with larger cylinders, (3 of 85 inches, and 3 of 90 inches diameter,) the "duty," of which (estimated by the number of lbs. lifted 1 foot high, by the consumption of 1 bushel of coals,) far exceeds the performance of any engines in this district, and in one engine amounts to above 80,000,000 lbs. l.

(c) A Dury lamp in good order, is supposed by the agents of all these collieries to afford perfect security against fire-damp. The workings of the deepest collieries are frequently carried to an amazing extent *from one shaft*. Several thousand acres of coal are generally held under lease by the proprietors of the largest collieries, the rent being compounded of a "certain" annual rent, and an additional "ten tail" rent for each ton of coals (=18½ Newcastle chaldrons of 53 cwt.) sold beyond the quantity stipulated for the "certain" rent. These ten-tail rents are mostly between 14s. and 24s. per ton, according to the value of the seams and difficulty of reaching them. The capital required for the establishment of a first-rate sea-sale colliery, including winning, machinery, houses, waggons, &c., is very large, (from 50,000, to upwards of 150,000.)

† Eppleton.

(d) "Of the remaining 2¼ per cent. of small coal, 2 per cent. is consumed by the colliery workmen, and 1¾ per cent. sold."

(e) The corresponding prices of coal of inferior quality were from 6s. 6d. upwards to those given above, which were the highest reported in 1836-7. The corresponding price and sales of 3 of the largest Northumberland collieries, were Killingworth, 11s. 6d., 82,699 tons, 21s.; Bewick and Co.'s, 10s. 6d., 52,603 tons, 20s. 6d.; Holywell, 9s. 3d., 11s., 52,162 tons, 20s. 6d., 21s.

(f) The earnings necessarily vary with the state of the coal-trade—as it affects each colliery.

(g) There are some inconsiderable beds of iron-stone, and some fire-clay in most of these collieries—the former not worth working.

(h) This "back," or cleat, is a parallel and vertical cleavage of the coal, of which the planes universally avail themselves in their principal excavations (called "boards," which are "driven" perpendicularly to it. The narrow passages used for travelling and air courses (called headways or endings) being parallel to the cleavage. There is generally a considerable uniformity in its direction throughout large districts of the coal-field—but occasionally variations occur in the same colliery, and in superincumbent seams.

(i) The workings extend from 10 to 14 fathoms *below* this depth, in consequence of downcast dykes and the declination of the seam—and the natural temperature of the strata contiguous to the lowest workings is reported to exceed 76° Fahrenheit.

A Letter from DR. POTTER, of the United States, transmitting the last Annual Report of the Regents of the University of the State of New York.

[*Read before the Statistical Section of the British Association, 23rd August, 1838.*]

THE Rev. Dr. Potter, of the United States, takes the liberty of transmitting to the Secretary of the Statistical Section of the British Association the last Annual Report of the Regents of the University of the State of New York. Having been present yesterday a few moments while the subject of popular education was under discussion, and happening to have this document in his possession, he has ventured to offer it as a contribution to the archives of the Society. The information which it embodies does not refer immediately to popular education, the higher schools and colleges being the only institutions immediately under the supervision of the Regents. The report, however, may serve to give some idea of the manner in which the higher seminaries of learning are conducted; by what means they are confederated so as to form one system; what measures are taken to secure the proper discharge of their duties; and the nature and amount of the patronage extended to them by the state. The report also contains some information respecting the efforts which are now making, not only in the state of New York, but in many, or, indeed, in most of the other states, to improve the character and qualifications of common school teachers.

In respect to common schools, the Secretary is doubtless aware that in nearly all the states they are placed by law under the immediate supervision of the government, and that a large proportion of the expense of maintaining them is discharged by the state treasury. In the state of New York, by means of this system more than nine-tenths of all the children between the ages of five and fifteen are brought into schools and taught the first elements of knowledge. It must be acknowledged, however, that, owing in part to the deficient qualifications of the teachers, and still more to the indifference of parents, the education imparted in many of these schools is exceedingly imperfect. Of this there is a growing conviction among the people, and this conviction has led to various measures for improving the condition of our common schools. Among these may be mentioned the establishment of newspapers devoted to the interests of education; the formation of societies to improve the character of school-books; the construction of school-houses, and the qualifications of teachers; and also the exercise, on the part of the state, of greater care in organizing, and greater liberality in supporting, the schools. In the state of New York about 1,000,000*l.* have been recently appropriated by the legislature to advance the interests of education. Of this sum about 75,000*l.* are set apart for the purpose of placing in every school district of the state a small library of useful and popular works, which may circulate among the families of the district. In general, it may be remarked that there is at present hardly any topic which in the United States excites so general and lively an interest as that of education. There is a growing conviction, that everything valuable in possession or prospect depends upon the intelligence and virtue of the people, and that no pains or expense should be spared to secure for them the blessings of a more thorough education.

It may also be mentioned as an encouraging fact, that the indispensable necessity of combining moral with intellectual training is now generally recognized. All our experience teaches us that the diminution of crime and the general improvement of the people is in direct proportion to the extent with which moral and religious instruction is combined with that which may be termed secular. Hence the remarkable fact that, in several penitentiaries where an examination has been instituted, no inmate has been found, or, at most, but one or two, who had previously enjoyed the benefit of a thorough Sunday-school course. This is attributed, not merely to the fact that religion is taught in Sunday-schools, but to the fact that, instead of being content, like too many common schools, with teaching children to read, they aim at instilling into the mind *great principles of truth and duty*, and of so instilling them that they shall ever afterwards be reverted to with pleasure and gratitude.

Apologising for this intrusion of a stranger upon the notice of the Section, Dr. Potter begs leave to express his best wishes for the success of the British Association in all its great and laudable objects.

Newcastle, August 22, 1838.

MISCELLANEOUS.

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ending 24th July and 21st August, 1838.

Quarters ending	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
24th July .	£. 19,286,000	£. 10,494,000	£. 29,710,000	£. 22,601,000	£. 9,749,000	£. 32,350,000
21st August .	19,481,000	10,298,000	29,779,000	22,747,000	9,746,000	32,493,000

Weekly Average Prices of Corn in England and Wales, in the Month of August, 1838.

	Weeks ending August					
	3rd.	10th.	17th.	24th.	31st.	Average of the Month.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat	69 11	71 8	75 7	77 0	74 5	73 8
Barley	32 9	33 5	34 5	34 6	34 6	33 11
Oats	23 0	23 3	24 2	24 9	24 3	23 11
Rye	37 1	37 3	39 3	40 0	40 11	38 10
Beans	38 0	38 8	40 4	41 10	41 7	40 1
Peas	35 2	37 6	35 11	37 9	38 2	36 10

JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

NOVEMBER, 1838.

Statistical Illustrations of the Principal Universities of the United Kingdom of Great Britain and Ireland. By H. LONGUEVILLE JONES, M.A., late Fellow of Magdalene College, Cambridge.

[Read before the Statistical Section of the British Association at Newcastle, August 21, 1838.]

THE sources from which the information contained in the accompanying tables has been derived are partly public and partly private. Of the former kind are the Oxford University Calendar for 1838, the Cambridge University Calendar for 1838, the Dublin University Calendar for 1838, and the Parliamentary Reports on the Scotch Universities, drawn up by the Commission appointed in 1826 and 1830, and published in vol. xii., 1831, p. 115, &c. of the general collection of Parliamentary Papers of the Commons.

Besides these works much private information has been used in determining the value of professorships, fellowships, &c., points on which the above works are mostly silent.

In determining the revenues of the Universities of Oxford and Cambridge, as distinct from those of the colleges, local information is almost all that can be obtained for arriving at an approximate estimate of their amount. There are no published returns upon the subject, or none that give sufficiently detailed information.

The University Calendars are, indeed, published every year, and contain full accounts of the personal composition, the literary and scientific movements, and, in some instances, of the revenues and property of these bodies; but they are by no means sufficient to shew either the moral force and effect of the Universities, or the real condition of their properties and revenues. In order to know accurately the moral force and the literary and scientific results of their institutions, it would be necessary to examine the statutes of each collegiate or university foundation, and to go into the history of their institutions in considerable detail—an enquiry foreign to our present purpose. But to ascertain the statistical condition of the universities and of the colleges which they contain, we can refer either to the books above mentioned or to Parliamentary Returns, or else to private local examination, which will afford approximate, if not entirely accurate, information, sufficient to give a tolerably compendious view of the subject.

To obtain this supplementary information is by no means an easy task. In the first place, a jealousy exists, in most collegiate and university

bodies corporate, of giving an insight into their pecuniary affairs; and, in the next place, the revenues of these foundations are derived from such complicated and often indirect sources that the true state of their accounts is a thing difficult to be clearly known, even to the persons charged with their administration; nor would the results of any two successive years be the same in a great majority of instances. To exemplify this in the case of Oxford, Cambridge, and Dublin, much of the collegiate revenue is derived from tithe property; some part from lands held by old and unusual tenures; some from payments of various fees; some from certain profits derived from the maintenance and charges of the students, &c., all of which are evidently liable to vary year by year, and are almost incapable of being accurately estimated. The universities, as bodies totally distinct from, and superior to, the colleges, are in possession of the rentals of estates left for purposes connected with religion, literature, and science; rentals and returns which are audited either by special auditors or by boards appointed by the universities. They receive also part of the fees payable by candidates for degrees, or by students on matriculation; of the fines exacted from students for breaches of discipline, &c.; and they derive a very considerable, though fluctuating, income from the profits of their immense printing establishments. It is generally understood that the management of the university accounts is much better organized at Oxford than at Cambridge; but there is no dispute as to the single-handed and disinterested manner in which the pecuniary affairs of these bodies are conducted. However intricate they may be, there is not the slightest doubt of the honest and honourable manner in which they are dispensed—a remark which applies with equal force to the University of Dublin. With regard to all this, however, there is no published information extant, or very little, beyond what is to be found in the university calendars; and, although the university accounts are open annually to the inspection of the voting members (members of convocation or senate), yet there are very few who ever think of looking into them, or who, if they did, would be able, without long acquaintance, to make them out.

The collegiate revenues consist principally of landed estates, of tithe impropriations, of the rent of rooms leased out to students, of fees paid by all members of the college, generally of trifling amount, and of profits upon various minor charges for articles of consumption, such as ale, &c. used by the students. These sources of income vary in different societies; some exist in one which do not in another. They by no means bear the same relative proportions in all colleges; and they are very difficult to be calculated with anything like accuracy. The accounts are, however, strictly audited by the bursar and the governing portion of the collegiate body every year; but they are open to the inspection only of the persons auditing, and, with the exception of the value of some fellows' and scholars' stipends, the university calendars are totally silent on the subject of the collegiate accounts. No published returns upon the actual revenues of any college are known to exist.

It is obvious from this that the results collected in the accompanying tables must, as far as these three universities are concerned, be considered as only approximative; they affect variable quantities, and cannot, therefore, be taken in themselves as constant. In all cases, how-

ever, where a doubt existed, the minimum value has been taken, it being the safer error to understate rather than to exaggerate the amount of income belonging to any public body, especially when so much room is left to calculative conjecture. The averages, where averages occur, have been taken rather at low than at high estimates, when pecuniary matters are concerned. In the point of numbers of students, &c., very little room has been left for conjecture, the information of the university calendars being positive on this part of the subject, and the tables in this respect may therefore be considered as nearly exact.

It may be said, in general, that the three universities of Oxford, Cambridge, and Dublin, are the only ones upon which the public are in possession of sufficiently explicit information. With regard to those of Scotland, long-established and flourishing as they are, much neglect appears to have prevailed in making known to the world what their annual movements and literary operations have been; and until the appearance, in 1830, of the elaborate Report of the Parliamentary Commissioners above alluded to, it can hardly be said that anything like accurate information was to be found upon the subject. Those papers are to be ranked among some of the best State Papers on record. The enquiry was entrusted to Commissioners who can rarely be equalled for rank and ability; and the conclusions at which they arrived, together with the plan for a reform of the Scotch university system recommended by them to Parliament, may be taken not only as a most valuable collection of observations, but also as a complete system of university legislation.

The university of Dumfries will be found, from the Report, to be regularly founded and endowed, and, we should think, ought to have been in activity before now. The formation of this institution is a rare instance in modern times of the patriotic devotion of the fortune of a private individual to the purposes of general education.

The younger universities of London and Durham, to which may be added the various collegiate institutions now growing up in different parts of the United Kingdom, are not yet sufficiently organized to allow of much tabularized information being collected with regard to them.

We will now proceed to explain the several Tables containing the results of our enquiries:—

Table I.*—*College Revenues*—exhibits a summary of the revenues of the colleges in the three universities of Oxford, Cambridge, and Dublin, subdivided under the following heads: 1st, Number and Income of the Heads of Houses; 2nd, Number and Income of Fellows. On this and the preceding head, the calendars say nothing, as far as the revenues are concerned; and here private knowledge has been entirely relied upon: the results are nearly all under their true value. 3rd, Number and Income of Scholars. In the cases of New College, Oxford, and King's College, Cambridge, it is not easy to determine the actual number of scholars, on account of these institutions being so connected with the Colleges of Winchester and Eton, that the line of separation can hardly be drawn; no scholars therefore have been put down in the table. At

Dublin there is an uncertainty connected with the number of Erasmus Smith's exhibitions; whether they are to be considered as belonging to the university, or to the college, or to neither, but to the schools established by that founder. 4th, The head, College Officers, includes not only the tutors, but also the lecturers, deans, stewards, &c.; and though they do not all derive their emoluments of office from the tuition-money, yet in general the sums they receive from other sources are so small, that they may be considered as merged either in the tuition-money or in the general article of College Revenue. 5th, Number and Value of Prizes. No definite information is given on this point by the Oxford calendar, nor are the Cambridge and Dublin calendars so explicit as they might be. In the case of Cambridge, the amount of college prizes is much greater than what is stated at p. 65 (*viz.*, 600*l.*); probably on account of the value of books not having been taken into the estimate. 6th, Number of Incumbents and Benefices, with their Average Value. In this division, all benefices are counted as single distinct benefices, when they are separately entered in the King's Books; and their average annual value is in all cases assumed to be 300*l.* This sum is too large perhaps in the case of some colleges, such as Trinity College, Cambridge, where the benefices are mostly vicarages; and is too small in others, such as Magdalen College, Oxford, where the value of the benefices is proverbial; but as a general average it is believed to be far beneath the real value. The number of cases of pluralities will be observed to be remarkably small, in proportion to the total number of benefices. 7th, The Rent of Rooms is assumed to vary from 10*l.* to 15*l.* per annum; and is believed to be very nearly correct. In certain cases, such as All Souls College, Oxford, and King's College, Cambridge, where the members of the foundation are the only members in residence, and either pay no rent, or else pay it to themselves in their corporate capacity, no rent is put down. 8th, The College Revenues are formed by the addition of the foregoing sums, with the exception of tuition-money—an item with which the college has no concern, it being understood to be a private affair between the college-tutor and the pupil, and with the exception also of a few fees not taken into account under the head of tuition-money, and of the value of benefices. The revenues of the Scotch and other colleges are inserted in the general Table.

Table II.*—*Degrees*—contains an account of all the members on the books or boards of each college of the three universities above-mentioned, classed exactly as they stand in the calendars, the members of foundations being however ranged among the graduates, &c. Thus those only are inserted as noblemen who are classed under that head in the calendars, and that too without any distinction of degree. The usage of the three universities in arranging their members is by no means uniform; and particularly with regard to noblemen and gentlemen-commoners, or fellow-commoners. This last-named class is enumerated without any distinction of bachelor of arts or under-graduate; and in all colleges, except Christ church, the distinction ceases as soon as the gentleman-commouer or fellow-commoner has taken a degree

superior to, or different from, that of B.A. Among the titles at Oxford, connected with graduation, is one not yet adopted at Cambridge or Dublin, "Student of Medicine," S.M.; and in the same way the class at Cambridge called "Ten-Year Men," T.Y.C., does not exist in any other university. In the Oxford calendar several graduates are counted twice over, and in one instance, *three times*; so that the numbers of Oxford are rather smaller than they are stated to be. In the Cambridge calendar, a mistake exists in the enumeration of the members of St. John's College, which are greater by 9 than they are there stated to be; while, therefore, it appears by that book, that the total number of the university (not of the colleges only) is 5566, the real number is 5575. In one curious instance at Oxford, the professor of music, Dr. Crotch, is not reckoned in the calendar among the members of the university. The class of *commorantes in villâ* is unknown at Oxford.

Table III.* contains the members of the three universities of Oxford, Cambridge, and Dublin, arranged according to their ranks. Thus one column contains all the members bearing any title of honour whatever, another the clergymen, and so on. There is also in this table a subsidiary division, in which an attempt is made to find the "stimulating force" of each college. Assuming that the *practical pecuniary* influence of the various revenues, possessed or disposed of by each college, is to apply a certain stimulus to the persons either in possession of these revenues or in expectation of them, or having the faculty of competing for them, we may find the pecuniary stimulating force exercised by these revenues, by dividing in each case their sum by the number of persons influenced by them. The quotient will give the proportion of a certain sum of money applicable to a single individual, and may be taken as an index of the average pecuniary stimulating force acting on each member of the college. Since the incumbencies of the benefices are at the disposal of the colleges, their value and the number of their incumbents come into the composition of this force; and the other members who are affected by it may be assumed as composed, on the average, 1st, of all the members of the foundations; 2nd, of all the members of each college who are not members of the senate or convocation, elections to college offices or preferment being very rarely made from members of the senate or convocation, who are not previously on the foundation. The result, after all, is to be considered as a mere speculation, for the pecuniary stimulating force is so mixed up with the moral force of these institutions, that their effects can hardly be estimated separately. The universities, too, connected as they are with the frame-work of the upper ranks of society, exercise a silent and almost imperceptible, but constant influence upon the education of the country, and the results of that education, which it is very difficult rightly to appreciate.

Table IV.† presents a comparative view of the stimulating force of each college at Cambridge, with the literary or scientific honours gained by each society, according to the interesting and useful table published in the Cambridge calendar, which is wanting in the other two works. This proportion of effects to force, which in the case of King's College, for example, is as 1 to 3, will be observed in those of St. John's and

Trinity to be about 5 to 1, and 10 to 1 respectively. But here again it is evident that the moral force of the respective institutions must be taken largely into account, in order to obtain the true *duty* of such vast intellectual machinery.

In the Table No. V.* is a statement of the average incomes of the various functionaries of the universities of Great Britain. These are accurate for Scotland only up to the date of the report above alluded to, 1827—1830; and it may be reasonably supposed, from the increasing prosperity of the Scotch universities, that these incomes have since been considerably augmented, on account of the increase of students.

Under the division of expenditure, Table No. VI.,† the average annual sum spent at Oxford, is assumed for each individual at 300*l.* per annum; at Cambridge, at 250*l.*; at Dublin, 200*l.*; at Edinburgh, rather under 100*l.*; at Glasgow, about 70*l.*; at Aberdeen, about 50*l.*; and at St. Andrew's, at about the same sum, or rather more. At Dumfries, the university is not yet formed, and at London and Durham no returns sufficiently accurate have hitherto been obtained.

Table VII.‡ gives a complete list of all the professorships and lectureships in each of the universities, classed according to subjects.

Table VIII.§ contains most of the results of the above tables, and others not comprised in them, giving a general statistical view of the *personnel* and *materiel* of each university.

In the cases of the Scotch universities and colleges there is a difficulty in distinguishing between the university and college officers; the distinction between the university and the college not being so precise as in England; the numbers, therefore, under these heads are somewhat indeterminate. The same annual average value is adopted for the university benefices as for college benefices, much below what is believed to be their real value.

In estimating the incomes of the universities, as distinct from those of the colleges, the same difficulty of distinction exists in the Scotch universities, and in that of Dublin, as is the case with regard to the officers. For Cambridge and Oxford the sources of the income may be indicated, though the amount cannot be so easily estimated. Thus those revenues held in trust for particular purposes, such as museums, botanical gardens, &c., are not taken into account; the only fund partaking of this nature, which is taken notice of, is that which constitutes the principal wealth of the universities—the profits from the printing-offices. These establishments, having peculiar privileges of monopoly, in the cases of all Bibles, Testaments, and Prayer-Books published without notes, and having attained considerable celebrity as classical and mathematical presses, are in the enjoyment of a vast printing-trade.

It appears by parliamentary papers (*Commons*, 1815, *July* 6, Nos. 461 and 462), that—

The <i>drawback</i> on paper printed at the Cambridge University Press, during seven years ending 5th April, 1815, was	£.	s.	d.
The <i>drawback</i> on paper printed at the Oxford University Press, during the same period, was .	13,087	7	6
	18,658	2	6

	£.	s.
The value of Bibles, Testaments, and Prayer-Books printed at Cambridge, during the same period, was	149,050	4 2
The value of other books printed at Cambridge, during the same period, was	16,993	15 0
	<hr/>	<hr/>
	166,043	19 2
	<hr/>	<hr/>
The value of Bibles &c. printed at Oxford, during the same period, was	212,917	1 8
The value of other books printed at Oxford, during the same period, was	24,776	5 0
	<hr/>	<hr/>
	237,693	6 8
	<hr/>	<hr/>
Yearly average value, Cambridge	23,720	11 3
Yearly average value, Oxford	33,956	3 9

If the peculiar circumstances under which the universities conduct their business be taken into account, and compared with the general condition of the book trade, it may be calculated that nearly 30 per cent. upon the above sums is clear profit. Since 1815, however, the book trade of the universities has at least doubled; and their profits must have kept pace with their extent of business, from the circumstances of monopoly attending it. In calculating the revenues of the universities in the table, the profits of the printing-press at Oxford are assumed to be 10,000*l.* per annum; at Cambridge, 5000*l.*; both sums being greatly below the reputed amounts. The other income of the universities arises from degree-fees and estates, &c.; which for Oxford is assumed at 5000*l.* per annum, and for Cambridge at 4000*l.*; the scholarships of the universities, the professorships, and the prizes, make up the other income. In all cases, the common reputed value and the probable value are both much above the sums given in the Table.

In the case of the Scotch universities, there is no doubt but that their revenues must have been much augmented since the time of the report above quoted, which, however, is the only authentic document published on the subject.

There is very little chance of error in estimating the total incomes of the universities and colleges mentioned in this table at 500,000*l.*, and if to this be added the tuition-money, and the value of the benefices, the total amount disposable by the universities is about 800,000*l.* per annum; which is in reality only a small sum when compared either with the annual budget and revenues of the country, or with the paramount importance of superior education to a great and intelligent nation.

TABLE No. I.—College Revenues.

NOTE.—Whenever an Asterisk is affixed to any figures in the following Tables, it signifies that the figures marked are doubtful.

COLLEGES.	HONDS.		FELLOWS.		Scholarships, &c.		College Officers, and Tuition Money.		Prizes. ^a		Benefices.			Rest of Revenues.	College Revenues.
	Number.	Revenue.	Number.	Revenue.	Number.	Value.	Number.	Amount.	Number.	Value.	Number.	No. of Incumbents.	Value.	Amount.	Amount.
OXFORD.		£.		£.		£.		£.		£.			£.	£.	£.
University . . .	1	800	12	2,400	18	270	6	600	..	..	10	10	3,000	430	3,900
Balioi . . .	1	800	12	2,400	28	420	9	850	..	..	20	18	6,000	640	4,350
Merton . . .	1	700	24	4,800	20	300	12	300	..	..	16	16	4,800	230	6,030
Exeter . . .	1	700	25	5,000	19	285	9	1,300	..	..	12	9	2,600	960	6,965
Oriel . . .	1	1,000	18	3,960	15	235	8	800	..	..	13	12	3,900	630	5,815
Queen's . . .	1	800	24	4,800	49	735	9	1,200	..	..	30	26	9,000	920	7,355
New . . .	1	1,000	70	17,500	..	..	23	120	..	..	37	36	11,100	90	18,890
Lincoln . . .	1	700	12	2,400	21	315	7	400	..	..	11	10	3,300	300	3,715
All Souls . . .	1	1,000	40	10,000	4	60	2	..	..	..	18	17	5,400	..	11,050
Magdalen . . .	1	1,000	40	12,000	30	450	16	900	..	..	37	35	11,100	160	13,610
Brazen Nose . . .	1	800	20	4,000	47	750	14	750	..	..	40	39	12,000	560	6,110
Corpus Christi . . .	1	700	20	4,000	24	360	11	250	..	..	22	22	6,600	190	5,250
Christ-church . . .	1	2,000	8	8,000	..	..	17	3,000	..	..	94	89	28,200	1,910	22,010
Trinity . . .	1	700	101	10,100	..	..	..	..	..	..	9	9	2,700	640	3,980
St. John's . . .	1	800	50	10,000	2	30	8	350	..	..	29	29	8,700	270	11,100
Jesus . . .	1	800	19	2,800	18	270	11	750	..	..	34	22	7,200	570	4,440
Wadham . . .	1	800	15	3,000	31	465	10	790	..	..	11	9	3,300	600	4,865
Pembroke . . .	1	700	14	2,800	31	465	7	550	..	..	12	12	3,900	430	4,385
Worcester . . .	1	700	21	4,200	21	315	6	880	..	..	9	8	2,400	680	5,895
St. Mary Hall . . .	1	300	..	..	..	..	1	200	..	..	..	..	..	150	450
Magdalen Hall . . .	1	800	..	..	4	60	1	800	..	..	1	1	300	780	1,640
New Inn Hall . . .	1	250	..	..	..	..	..	220	..	..	..	..	..	900	450
St. Alban Hall . . .	1	200	..	..	..	..	2	200	..	..	..	..	..	150	350
St. Edmund Hall . . .	1	300	..	..	1	15	1	300	..	..	..	..	..	220	535
Total . . .	24	18,350	557	116,560	399	6,030	199	15,650	..	..	455	430	136,500	11,730	152,670
CAMBRIDGE.															
Peterhouse . . .	1	500	24	3,960	50	440	10	750	13	26	11	11	3,300	720	5,646
Clare Hall . . .	1	600	22	4,400	46	680	5	600	13	42	16	16	4,800	480	6,202
Pembroke . . .	1	600	16	2,960	43	670	8	550	8	16	10	10	3,800	500	4,746
Calus . . .	1	1,000	29	7,370	41	1,580	14	1,100	8	54	25	16	7,500	940	10,844
Trinity Hall . . .	1	300	12	1,440	16	210	4	600	11	65	10	8	3,600	430	2,445
Corpus Christi . . .	1	400	12	2,400	60	660	10	900	5	25	12	11	3,600	1,050	4,535
King's . . .	1	1,600	70	20,400	..	..	11	150	14	71	24	30	10,200	..	22,071
Queen's . . .	1	600	20	4,000	26	440	9	1,300	7	42	11	10	3,800	600	5,582
Catharine Hall . . .	1	500	14	2,060	43	670	8	850	9	21	4	4	1,200	320	3,871
Jesus . . .	1	400	16	3,200	46	860	6	800	10	38	16	15	4,800	500	4,938
Christ's . . .	1	800	15	3,500	89	1,740	7	900	13	21	17	15	5,100	720	6,971
St. John's . . .	1	1,000	61	10,660	126	2,000	25	2,200	64	110	48	45	14,400	3,750	17,420
Magdalen . . .	1	900	17	1,530	42	900	6	600	9	78	8	7	2,400	540	3,998
Trinity . . .	1	2,000	60	14,400	83	1,100	34	5,000	50	159	63	57	18,900	3,750	21,409
Emmanuel . . .	1	250	15	2,500	40	670	9	750	9	37	18	17	5,400	720	4,777
Sidney . . .	1	600	12	2,400	36	650	7	400	8	42	6	6	1,800	540	4,232
Downing . . .	1	500	16	3,200	6	120	6	300	..	..	2	1	600	400	4,220
Total . . .	17	12,650	421	90,330	793	13,390	179	17,750	251	1038	311	290	93,300	15,860	133,268
DUBLIN.															
Trinity . . .	1	2,000	25	25,400	70*	2,100	10	20,000	17	..	31	31	9,200	2,000	21,500

* No information on this point is given in the Oxford Calendar.

TABLE No. II.—Degrees.

OXFORD.													
University	Nob.	D.D.	D.C.L.	D.M.	D. Mus.	B.D.	M.A.	B.C.L.	B.M.	B.A.	B. Mus.	S.C.L.	S.M.
Baliol	5	3	..	3	..	..	108	3	..	54	..	3	..
Merton	1	2	4	1	..	..	114	2	..	86	..	1	..
Exeter . . . . .	..	5	1	..	..	3	57	..	..	32	..	..	..
Oriel . . . . .	..	6	1	9	..	7	110	..	1	62	..	..	..
Queen's	1	9	5	1	..	4	144	..	..	79	..	..	5
New . . . . .	..	19	3	..	..	9	162	1	1	25	..	1	..
Lincoln	2	3	6	..	..	2	57	24	..	11	2	12	..
All Souls . . . . .	..	2	..	..	..	16	48	1	..	17	..	1	..
Magdalen . . . . .	..	5	21	..	..	4	47	8	1	8	..	6	..
Brasen Nose	1	7	1	1	..	40	79	..	..	31	..	2	..
Corpus Christi . . . . .	..	8	8	6	..	17	198	..	..	64	..	2	..
Christ-church . . . . .	..	6	1	1	..	97	59	1	..	14	..	2	..
Trinity	65	19	6	6	10	9	394	3	3	111	1	127	15
St. John's	1	2	2	1	..	15	95	3	..	70	..	2	..
Jesus	1	4	18	1	..	23	69	6	2	42	..	2	..
Wadham . . . . .	..	5	3	..	..	19	83	1	..	31	..	1	..
Pembroke . . . . .	..	2	1	2	..	2	80	..	..	75	..	1	..
Worcester . . . . .	..	2	2	..	..	4	85	..	..	38	..	1	..
St. Mary Hall . . . . .	..	7	2	2	..	1	95	2	..	30	..	10	..
Magdalen Hall	1	4	..	1	..	..	17	..	..	12	..	2	..
New Inn Hall . . . . .	..	2	2	1	..	2	50	..	..	31	..	15	..
St. Alban Hall . . . . .	..	1	..	..	..	..	4	1	..	17	..	3	..
St. Edmund Hall . . . . .	..	1	..	..	..	..	9	1	..	8	..	..	1
Total	78	123	27	30	10	205	2137	56	8	951	4	29	201
CAMBRIDGE.													
University	Nob.	D.D.	D.C.L.	D.M.	D. Mus.	B.D.	M.A.	B.C.L.	B.M.	B.A.	B. Mus.	S.C.L.	P.C.
Peterhouse . . . . .	..	4	..	1	..	6	88	2	2	32	..	..	8
Clare Hall . . . . .	..	1	..	..	..	4	76	1	1	26	..	1	3
Pembroke . . . . .	..	2	..	1	..	..	42	..	3	34	..	..	3
Cains	1	1	1	12	..	1	108	1	14	49	..	1	1
Trinity Hall . . . . .	..	11	..	..	..	..	34	25	1	6	..	4	..
Corpus Christi . . . . .	..	2	..	1	..	12	73	..	1	15	..	4	..
King's . . . . .	..	2	..	..	..	1	76	..	..	50	..	..	..
Queen's	1	..	1	3	..	18	114	6	3	53	..	17	..
Catharine Hall . . . . .	..	3	..	..	..	2	70	2	2	44	..	7	..
Jesus . . . . .	..	1	..	..	..	2	75	1	1	36	..	5	..
Christ's	5	2	1	2	..	1	89	..	1	51	..	9	..
St. John's	25	16	3	5	..	70	454	6	6	300	..	17	..
Magdalene	8	..	..	..	..	1	76	1	1	36	..	7	..
Trinity	73	12	5	10	..	12	761	9	11	339	..	40	..
Emmanuel	2	4	1	1	..	18	83	4	1	33	..	6	..
Sidney	1	6	..	1	..	12	37	1	2	9	..	4	..
Downing . . . . .	..	..	..	1	..	1	26	..	3	2	..	17	..
Commarantes in Villa . . . . .	..	..	..	2	..	..	9	..	..	..	..	..	..
Total	116	56	23	40	1	162	3398	59	53	1015	10	5	166
DUBLIN.													
University	Nob.	D.D.	D.C.L.	D.M.	D. Mus.	B.D.	M.A.	B.C.L.	B.A.	P.C.	Poss.	Siz.	Total.
Trinity	3	22	13	6	1	1	29	1	162	185	1159	42	1624

* Reckoned with B.A.

TABLE No. III.—Ranks and Stimulating Forces.

OXFORD.	RANKS.						STIMULATING FORCES.		
	Members on the Boards.	Noblemen, Hon., Bts., Knights.	Clergy-men.	Lay-men.	Members of Convocation.	Non-Members of Convocation.	Members.	College Revenues.	Stimulating Force per Head.
University . . .	234	6	94	140	119	115	189	£. 6,900	£. 49.6
Balliol . . .	308	5	104	199	197	176	904	16,260	56.3
Merton . . .	130	6	43	88	66	64	100	10,830	108.3
Exeter . . .	313	1	112	201	127	186	111	10,565	50.
Oriel . . .	318	23	195	192	163	155	222	9,715	53.3
Queen's . . .	265	..	162	103	180	85	145	16,255	112.1
New . . .	150	2	83	67	70	80	150	29,680	197.9
Lincoln . . .	131	..	67	64	66	65	96	7,015	73.
All Souls . . .	104	23	52	52	78	96	73	16,460	238.6
Magdalen . . .	169	3	109	60	196	43	122	14,710	130.5
Brasen Nose . . .	294	5	173	218	237	107	235	13,110	80.4
Corpus Christi . . .	119	1	75	44	86	83	78	11,850	151.9
Christ-church . . .	908	145	315	588	481	423	579	56,910	96.7
Trinity . . .	220	2	116	164	116	164	185	6,680	26.1
St. John's . . .	228	3	194	104	117	111	164	19,680	120.7
Jesus . . .	145	..	78	68	63	93	124	11,640	95.8
Wadham . . .	245	..	105	140	87	158	180	8,165	45.3
Pembroke . . .	181	..	105	78	106	76	104	8,255	79.7
Worcester . . .	239	3	113	126	104	156	158	8,225	52.5
St. Mary Hall . . .	56	1	21	35	23	33	35	452	12.8
Magdalen Hall . . .	182	..	66	116	67	125	127	1,940	15.2
New Inn Hall . . .	49	..	10	39	5	44	45	450	10.
St. Alban Hall . . .	25	..	12	12	10	15	17	350	20.5
St. Edmund Hall . . .	100	..	63	38	53	47	49	535	10.9
Total . . .	5264	224	2330	2984	2646	2618	3501	279,170	106.6

CAMBRIDGE.	RANKS.						STIMULATING FORCES.		
	Members on the Boards.	Noblemen, Hon., Bts., Knights.	Clergy-men.	Lay-men.	Members of the Senate.	Non-Members of the Senate.	Members.	College Revenues.	Stimulating Force per Head.
Peterhouse . . .	205	3	85	190	96	107	140	£. 8,946	£. 63.9
Clare Hall . . .	169	1	82	86	80	89	124	11,002	89.5
Pembroke . . .	124	2	35	89	45	79	100	7,746	77.5
Trinity . . .	280	5	156	124	124	156	197	18,344	83.1
Corpus Christi . . .	139	2	35	104	45	94	110	6,446	49.5
King's . . .	227	3	100	127	90	137	186	8,135	51.4
Queen's . . .	110	1	51	59	79	31	101	22,271	319.5
Catharine Hall . . .	353	2	156	197	130	223	249	8,363	36.
Jesus . . .	222	..	101	102	75	123	144	4,771	33.1
Christ's . . .	179	3	68	121	78	101	129	9,798	76.9
St. John's . . .	222	6	105	117	99	123	154	12,071	78.3
Magdalene . . .	1096*	45	464	642	564	539	617	31,820	51.5
Trinity . . .	188	15	89	99	84	104	121	6,398	52.8
Emmanuel . . .	1698	140	506	1192	864	834	947	40,309	42.5
Sidney . . .	220	3	101	119	114	106	139	9,677	96.
Downing . . .	101	2	49	52	55	46	61	6,033	98.8
Commorantes in Villa . . .	50	6	14	36	28	22	26	4,820	185.4*
Total . . .	5575	229	2181	3294	2663	2912	3617	226,568	86.

DUBLIN.	RANKS.				STIMULATING FORCES.		
	Members on the Boards.	Noblemen, Hon., Bts., Knights.	Clergy-men.	Lay-men.	Members.	College Revenues.	Stimulating Force per Head.
Trinity	1634	4	42	1582	1422	40,800	28.7

TABLE No. IV.—*Cambridge Forces and Honours.*

	Peterhouse.	Clare Hall.	Pembroke.	Calis.	Trinity Hall.	Corpus Christi.	King's.	Queen's.	Catharine Hall.	Jesus.	Christ's.	St. John's.	Magdalen.	Trinity.	Emmanuel.	Sidney.	Downing.	Total.
Stimulating Force }	£. 63·9	£. 89·5	£. 77·5	£. 98·1	£. 49·5	£. 51·4	£. 319·5	£. 36	£. 33·1	£. 75·9	£. 78·3	£. 51·5	£. 52·8	£. 42·5	£. 86	£. 98·8	£. 135·4	£. 66
University Honours }	29	18	65	53	9	33	105	30	18	31	46	276	33	522	16	29	2	1315

TABLE No. V.—*Average Incomes.*

	Heads.	Fellows.	University Scholars, &c.	College Scholars, &c.	Professors.	Lecturers.
	£.	£.	£.	£.	£.	£.
Oxford	764·6	211	42·4	15	187·3	150
Cambridge	744	209·6	50	15	181·2	47·7
Dublin	2000	1016	..	30	153·8	..
Edinburgh	151	..	..	16·1	620	..
Glasgow	200	..	..	18	553·8	..
Aberdeen	300	..	..	13·3	204·5	..
St. Andrew's	272·5	..	..	12·2	314·1	..
Dumfries	292·7	..	..	..	292·7	..
London . . . . .	..	..	30	..	..	..
Durham . . . . .	..	..	..	..	500	50

TABLE No. VI.—*Expenditure, &c.*

	Number of Members usually Resident.	Annual Expenditure of Members usually Resident.	Rate of Increase.	Number of Degrees conferred in 1837.	Stimulating Force of Universities.
		£.			£.
Oxford	1600*	480,000*	In 1836 .. 5154 In 1837 .. 5264 Diff. 110 In 1836 .. 5467 In 1837 .. 5575 Diff. 108	434	106·6
Cambridge	1600*	400,000*			
Dublin	800*	160,000*			
Edinburgh	2300*	200,000*			
Glasgow	1300*	90,000*	1624	528	66
Aberdeen	650*	30,000*	..	370	28·7
St. Andrew's	300*	17,000*	..	150*	10·2
Dumfries . . . . .	..	..	..	80*	9·9
London . . . . .	..	..	..	..	13·4
Durham . . . . .	..	..	..	..	14·8

TABLE NO. VII.—*Professors and Lecturers.*

PROFESSORS AND LECTURERS.	Oxford.	Cambridge.	Dublin.	Edinburgh.	Glasgow.	Aberdeen.	St. Andrew's.	Dumfries.	London.	Durham.	Total.
Divinity	2	3	1	3	1	2	2	1	1	..	16
Ditto Lecturers	1	3	3	..	..	1	..	..	..	..	8
Moral Philosophy	1	1	1	1	1	2	1	1	1	..	10
Philosophy Lecturers . . . . .	..	1	..	..	..	..	..	..	..	..	1
Logic . . . . .	..	..	..	1	1	1	1	1	1	..	6
Ditto Lecturers . . . . .	..	1	..	..	..	..	..	..	..	..	1
Rhetoric . . . . .	..	..	1	1	..	..	..	..	..	..	2
Ditto Lecturers . . . . .	..	1	..	..	..	..	..	..	..	..	1
Greek	1	1	1	1	1	2	1	1	1	1	11
Latin, Humanity . . . . .	..	..	..	1	1	1	1	1	1	..	6
Classical Literature . . . . .	..	..	..	..	..	..	..	..	..	..	1
Hebrew	1	1	1	1	1	..	1	1	1	1	8
Oriental Languages . . . . .	..	..	..	..	..	2	..	1	1	..	4
Sanscrit	1	..	..	..	..	..	..	..	..	..	1
Hindoostanee . . . . .	..	..	..	..	..	..	..	..	1	..	1
Arabic	1	2	..	..	..	..	..	..	..	..	3
Ditto Lecturers	1	..	..	..	..	..	..	..	..	..	1
Modern Languages . . . . .	..	..	..	..	..	..	..	1	..	1	2
French . . . . .	..	..	1	..	..	..	..	..	2	..	3
Italian . . . . .	..	..	1	..	..	..	..	..	2	..	3
Spanish	1	..	1	..	..	..	..	..	2	..	3
English . . . . .	..	..	..	..	..	..	..	1	1	..	1
Anglo-Saxon	1	..	..	..	..	..	..	..	..	..	1
German . . . . .	..	..	1	..	..	..	..	..	2	..	3
Poetry	1	..	..	..	..	..	..	..	..	..	1
Music	1	1	..	1	..	..	..	..	..	..	3
Ancient History	1	..	..	..	..	..	..	..	..	..	1
Modern History	1	1	1	..	..	..	..	..	..	1	4
Ecclesiastical History . . . . .	..	..	..	..	1	..	1	1	1	..	3
Universal History . . . . .	..	..	..	..	..	..	..	..	1	..	2
Political Economy	1	1	1	..	..	..	1	..	2	..	5
Civil Law	1	1	1	1	1	1	..	..	..	..	6
Public Law, Jurisprudence . . . . .	..	1	1	1	1	1	..	..	2	1	4
English and Common Law	1	1	1	1	..	..	..	1	1	..	5
Conveyancing . . . . .	..	..	..	1	..	..	..	..	..	..	1
Ditto Lecturers . . . . .	..	..	..	..	..	1	..	..	..	..	1
Astronomy	1	2	1	1	1	..	..	..	..	..	6
Ditto Observers	1	1	..	..	..	..	..	..	..	..	2
Mathematics . . . . .	..	1	1	1	1	2	1	1	2	1	11
Ditto Lecturers . . . . .	..	1	5	..	..	..	..	..	..	..	6
Algebra Lecturers . . . . .	..	17	..	..	..	..	..	..	..	..	17
Geometry	1	..	..	..	..	..	..	..	..	..	1
Natural Philosophy	1	1	1	1	1	2	1	1	2	1	12
Ditto Lecturers	1	..	..	..	..	..	..	..	..	..	1
Geology . . . . .	..	1	..	..	..	..	..	..	1	..	2
Ditto Lecturers	1	..	..	..	..	..	..	..	..	..	1
Mineralogy . . . . .	..	1	..	..	..	..	..	..	1	..	2
Ditto Lecturers	1	..	..	..	..	..	..	..	..	..	1
Mining and Civil Engineering . . . . .	..	..	..	..	..	..	..	..	2	..	2
Chemistry	1	1	1	1	1	1	..	..	2	1	9
Botany	1	1	1	1	1	1	..	..	1	..	7
Zoology, Natural History . . . . .	..	..	1	1	1	1	..	..	2	..	5
Ditto Lecturers . . . . .	..	..	..	..	..	1	..	..	..	..	2
Agriculture . . . . .	..	..	..	1	..	..	..	..	..	..	1
Commerce . . . . .	..	..	..	..	..	..	..	..	1	..	1
Anatomy	1	1	1	1	1	..	..	..	4	..	9
Ditto Lecturers	2	..	..	..	..	1	..	..	..	..	3
Surgery . . . . .	..	..	..	..	1	1	..	..	2	..	4
Ditto Lecturers . . . . .	..	..	..	..	1	1	..	..	..	..	2
Military Surgery . . . . .	..	..	..	1	..	..	..	..	..	..	1
Clinical Surgery . . . . .	..	..	..	1	..	..	..	..	..	..	1
Medicine	1	2	1	1	1	2	1	..	2	1	12
Ditto Lecturers	1	..	..	..	1	..	..	..	..	..	1
Practice of Medicine	1	..	..	1	..	..	..	..	..	..	2
Materia Medica . . . . .	..	..	..	1	1	..	..	..	2	..	4
Ditto Lecturers . . . . .	..	..	..	1	1	1	..	..	..	..	2
Clinical	1	..	..	1	..	..	..	..	..	..	2
Midwifery . . . . .	..	..	..	1	1	..	..	..	2	..	4
Ditto Lecturers . . . . .	..	..	..	..	1	..	..	..	..	..	1
Medical Jurisprudence . . . . .	..	..	..	1	..	..	..	..	1	..	2
Physiology . . . . .	..	..	..	..	..	..	..	..	1	..	1
Total	32	49	39	30	21	28	13	10	52	9	273

TABLE No. VIII.—General Abstract.

	Oxford.	Cambridge.	Dublin.	Edinburgh.	Glasgow.	Aberdeen.	St. Andrew's.	Dumfries.	London.	Durham.	Total.
Professorships No.	24	24	20	30	19	21	12	10	52	2	214
Lectureships	8	25	9	..	2	7	1	..	7	..	59
University Offices	37	20	9	10	11	8	7	..	6	..	115
College Officers	199	179	10	1	3	2	2	1	2	5	404
Fellowships	557	421	25	..	..	..	..	..	..	..	1,013
University Scholarships	26	26	..	..	..	..	..	..	..	27	79
University Fellowships	2	2	..	..	..	..	..	..	..	..	4
College Scholarships	399	793	70	80	71	240	72	..	..	..	1,725
Bursarships, &c.	5,264	5,575	1,624	2,267	1,279	640	327	..	..	230	17,196
Members on Books or Boards	2,646	2,663	..	32	21	23	14	10	..	105	5,514
Members of Convocation or Senate	24	17	1	1	1	2	2	1	2	1	52
Colleges . . . . .	..	..	..	..	..	..	..	..	..	..	..
University Benefices:											
Number No.	8	2	..	..	..	..	..	..	..	..	10
Incumbents	8	2	..	..	..	..	..	..	..	..	10
Value £	2,400	600	..	..	..	..	..	..	..	..	3,000
College Benefices:											
Number No.	455	311	31	..	..	2	..	..	..	..	799
Incumbents	430	280	31	..	..	2	..	..	..	..	743
Value £	126,500	93,300	9,300	..	..	290	..	..	..	..	229,390
University Prizes:											
Number No.	7	16	16	..	..	..	..	..	..	..	39
Value £	160	342	..	..	..	..	..	..	..	..	502
College Prizes:											
Number No.	..	251	17	100	100	70	100	..	..	..	638
Value £	..	1,038	..	..	..	..	..	..	..	..	1,038
Revenue:											
Professors & Lecturers £	5,400	5,500	4,000	18,600	11,680	5,522	3,456	3,220	..	1,360	58,678
University Officers	3,000	2,000	..	650	130	..	60	..	..	..	5,830
College Officers	15,650	17,750	20,000	..	..	..	..	..	..	..	53,400
Heads of Houses	18,350	12,650	2,000	151	455	600	545	992	..	..	35,043
Fellows	116,560	90,330	25,400	..	..	..	..	..	..	..	223,290
University Scholarships	1,188	1,300	1,000	..	..	..	..	..	..	880	4,368
College Scholarships	6,030	13,390	2,100	1,345	1,297	3,194	884	..	..	..	28,230
Total Revenue:											
Colleges £	152,670	133,268	31,500	888	9,406	3,479	4,097	3,220	..	..	339,522
Universities	22,000	16,000	..	22,300	3,511	3,479	997	..	..	2,260	69,817
Colleges & Universities	174,670	149,268	31,500	22,188	12,917	6,956	4,394	3,220	..	2,260	410,633

* Travelling Bachelors.

b Scotch Returns for 1822.

c Ibid., pp. 310, 343.

On the state of Agriculture and Condition of the Agricultural Labourers of the Northern Division of Northumberland. By L. HINDMARSH, Esq., of Alnwick.

[Read before the Statistical Section of the British Association, 21st August, 1838.]

Northumberland has long been an important and interesting portion of the kingdom. In feudal times it was often the arena of fierce contentions, and its ancient inhabitants depended for protection chiefly upon their swords. How much of that mental energy and vigorous character for which Northumbrians have long been distinguished is attributable to the influence of these stirring periods of their history, it may be difficult precisely to estimate; but in some degree, doubtless, they have contributed to their formation or increase. There is no

process through which human beings pass that does not leave some impress on the mind and character, and it is often in events sequestered in the remote recesses of the past that the philosopher traces the first germinations of the great phases of mental constitution. But, however interesting and seductive, this inquiry is foreign to our present object. We rejoice in the facts without exploring their causes, and especially do we rejoice that this characteristic vigour has long since taken a peaceful direction. In the culture of the soil it has found an ample and useful sphere of operation, and the present race of Northumbrians has become as distinguished in the use of the ploughshare as the ancient inhabitants were in the use of their swords. In this paper our object is to present to the Section a general view of the state of its agriculture, and of the condition and character of the agricultural population.

Area.—The entire county of Northumberland (including North Durham) comprehends an area of 1980 square miles, or 1,267,200 acres, which has been divided as follows:—

Able, or fit for tillage (including wood and coppice)	817,200 Acres.
Mountainous and improper for tillage,	450,000 „
	<hr/>
	1,267,200 „

Population.—The number of inhabitants in 1831 (including North Durham) was 237,481, and this year may be estimated, according to the last rate of increase (1·2 per cent. annually), to be 257,374. Since the passing of the Reform Act, Northumberland has been divided into two parts, northern and southern, the former of which (being solely an agricultural district), shall form the basis of the following observations. In 1831 the population of the northern division of Northumberland amounted to 80,739, and according to the last rate of increase (5½ per cent.†) may now be computed at 85,178. According to the Property Tax Returns of 1815, the value of property was 590,665*l*.

Soil.—That tract which borders upon the German Ocean is mostly a fertile clay loam, well adapted for the growth of wheat and of other kinds of grain. Three or four miles west from the coast, this runs into a poor moist loam on a clay subsoil, which, extending a few miles west, very generally terminates in a ridge of green moor-land or of heath. Then we have the fertile valleys of the Coquet, the Breamish, the Till, and the Beaumont, which, with the base of the Cheviot, and the fine expanse of land from Wooler to the Tweed, are nearly all a fertile gravelly, or sandy loam, admirably adapted for the growth of turnips and corn. The hill-pastures, commencing at the head of the Coquet, and sweeping round by the Cheviots to the Beaumont, are covered with fine green verdure, and rear the Cheviot sheep to the greatest perfection.

Climate.—The climate is very variable and generally humid, which causes this district to be so well adapted for the growth of grass, turnips, and other green crops that require moisture. The spring months are generally chilled by piercing easterly and northerly winds, and it is seldom before the month of June that the southern and western breezes steadily set in, and vegetation receives the full benefit of their genial influences. The snow rarely lies long near the coast, or on the fine dry gravelly soils, but some patches often remain upon the Cheviot (as was the case this year) till June. The mean temperature of the year in

* *Vide* Bailey and Culley's Report.

† Or ½ per cent. annually.

this county may be taken at 47·65, being about 37·50 in winter, 49·00 in spring, 63·10 in summer, and 51·65 in autumn. The harvest may be considered as a month later than in the south of England.

Size of Farms.—The size of tillage-farms generally varies from 150 to 1000 acres, and of hill-farms from 500 to 5000. Some are beyond these extremes both ways, but these limits will comprehend the greater portion of them. In the northern part of the district large capitals are embarked in farming, a few tenants occupying land to the rental of 8000*l.* or 4000*l.* a year.

Rents.—The rent of tillage-land varies widely, from difference of fertility, proximity to markets, and other causes which affect its value. The range may be assumed to be from 10*s.* to 50*s.* per acre, and the average at 21*s.* per acre. Of hill-pasture the variation in rent may be taken from 1*s.* to 6*s.* per acre, and the average at 2*s.* 6*d.* per acre. These rents are considerably below their range during the last war, but, compared with the prices of produce, are probably higher at present than at any former period. This can only be attributed to increased skill, and more profitable management on the part of the farmer.

Mode and Terms of Letting.—Farms are usually let by tender or proposal, excepting with an old tenant at the expiration of his lease, who is generally treated with privately. It was formerly not uncommon to grant leases for 21 years, but latterly very few have been extended beyond 12 or 14 years, and many have been for a shorter period. The occupiers are anxious that the process of curtailing the term of leases should not go further; for they consider nothing more conducive to the improvement and proper culture of the soil than the security and encouragement derived from leases of 14 years and upwards. To the practice of granting leases the Duke of Northumberland's custom is an exception; his estate being let from year to year, with half a year's notice previous to quitting. The tenants upon his estate have, however, all the advantages of leases without their disadvantages, for so long as they pay their rents and fulfil their covenants, no tenant is ever dispossessed of his farm: and in case of death, it is the rule to offer the farm to the eldest son. In the high character and noble-mindedness of their landlord, the tenants feel that they are secure of their tenancy for life, and therefore hesitate not to make every improvement within their means.

Time of Entry.—The time of entry is generally on the 12th of May, the out-going tenant has the away-going crop of corn, and the in-coming tenant for the first year has the grass and fallow quarter. The in-coming tenant has the use of the house and offices, and the out-going tenant has one or two cottages for himself or servant, and the use of the barn for thrashing the away-going crop. The time of entry on the Duke of Northumberland's estate is the 25th of March, the out-going tenant has no away-going crop, and the in-coming tenant pays for the wheat that has been sown, the grass seeds, and the working of the land. A half-year's rent on all farms is allowed to be in arrear, so that the tenant is one year in occupation before he pays any rent. The tenants on the Northumberland estate consequently get a crop of corn before they have any rent to pay, which renders less capital necessary for the commencement of their farms than for others on the general system, and induces keen competition for them whenever any are offered to the public.

Farm-Buildings.—The farm-buildings in this district are, mostly

built of stone, and those that have been recently erected are generally covered with blue slates, and, in extent and completeness of arrangement, may vie with any in the kingdom. The modern cottages are built of the same materials, and evince a considerable degree of neatness and taste; but the great proportion of the cottages in this district are old poor-looking buildings, covered with thatch, and containing one room on the ground-floor, from which a sort of lobby, which serves for a back-kitchen and lumber-room, and sometimes as a stall for a cow, is taken off by the partition of the close beds universally found in them. The interior, however, is generally tolerably well furnished with the requisites of humble life, and often exhibits a degree of comfort which the exterior does not promise.

Rotation of Crops.—Upon the fertile loams near the coast, the general course of husbandry is—

1st year, fallow or turnips.	3rd year clover.*
2nd „ wheat or barley.	4th „ oats.

This system can however only be followed with advantage when the land is of superior quality, or an opportunity exists of obtaining seaweed or other extraneous manure. Upon the light turnip soils, remote from the coast, the usual rotation is—

1st year, turnips† or fallow.	3rd and 4th year, clover.
2nd „ barley or wheat.	5th year, oats.

This is termed the five-course system, and seems the only one that can long be pursued on these soils without the aid of artificial manures. On some of the weak light soils it is not uncommon to allow them to remain three or four years in grass, which contributes much to their re-invigoration and subsequent fertility.

Agricultural Practice.—The land in this district is all ploughed with iron swing ploughs, drawn by two horses yoked abreast, except in the first or second ploughing of strong fallow land, when three or four horses are sometimes employed. An acre per day may be considered the average work of a two-horse plough, which is driven and held by one man. When three or four horses are put in, it is customary to have a boy or woman to guide the fore horses. The fallow quarter is commonly ploughed once before winter, to expose it to the ameliorating influence of the frosts. In the spring that portion of it intended for turnips or potatoes is again ploughed two or three times, and harrowed and rolled until it is sufficiently clean and fine for sowing and planting. The naked fallows intended for winter wheat are ploughed three or four times during the spring and summer, and the manure is generally laid on before the two last ploughings. When the season suits, October is the principal time of putting in the winter wheat, which is usually pickled, and sown broadcast. The grass seeds are sown amongst the young wheats in the months of April and May. Barley (with a small portion of wheat) is sown in the spring after turnips, and a considerable proportion is drilled or ribbed. Beans are mostly drilled, but oats, being the usual crop after clover, are sown broadcast. In this district rye is scarcely ever used as an article of food, and is very little cultivated.

* Occasionally beans are substituted for clover in the third year, and then the land is generally fallowed immediately afterwards, and thrown into the seven-course system.

† Very little turnip-land is fallowed.

Turnips are all drilled at intervals of about 26 to 30 inches. The manure (from 15 to 25 single-horse loads of dung per acre) is laid between the first-made drills, which are afterwards split in, and the turnips immediately sown upon the top of the newly-formed ridge or drill. Great care is previously taken by carting out and turnings, to have the manure well rotted. The use of bones as an artificial manure was first practically tested in this district in the year 1811 by two or three farmers, who imagined one ton per acre to be the requisite quantity. Within the last seven years the quantity of bone manure that has been used in the northern and western parts of this county has very greatly increased, and the usual weight per acre now laid on is about 7 cwt., or 16 bushels, reduced by grinding to the size of half-inch or dust. The usual mode of applying it is to sow it between the ridges by a machine, and then to split them in, according to the mode adopted where manure is used. A machine for depositing the bones and sowing the turnip seed at one time has been partially used, but the former is the most general mode. Animalised carbon (manufactured by Mr. Owen, of Copenhagen) has also been used upon a small scale. The following experiments upon the efficiency of these manures, in rearing turnips, were made by Mr. Chrisp of Hawkhill last year:—

	Cwt.	qrs.	lbs.
1. Fold-yard manure (led out after Christmas and turned in spring), at the rate of 30 loads per acre—quantity of land not stated, but the same in each experiment produced turnips	4	2	12
2. $\frac{1}{2}$ ton of carbon, value 12 <i>s.</i> 6 <i>d.</i> , mixed with 8 bushels of bone-dust, value 23 <i>s.</i> , in all 35 <i>s.</i> 6 <i>d.</i> , produced	5	0	26
3. 16 bushels of bone-dust, value 46 <i>s.</i>	5	2	11
4. $\frac{1}{2}$ ton of carbon, value 25 <i>s.</i>	5	2	16

Subsoil ploughing has not been practised to any large extent in this district, but much has been done of late years by draining; and if the system adopted by the Duke of Portland, of thorough draining his strong lands, and charging an acreage, were generally followed by landlords, the improvement in the productiveness of cold retentive soils would be incalculable.

Upon the good fertile loams and turnip soils the average produce per acre of wheat may be taken at 30 bushels; oats 44; barley 39; beans 30. Upon the poor clay soils the crops may be estimated from $\frac{1}{2}$ to $\frac{1}{3}$ less.

The reaping is performed chiefly by the sickle: and seven women, with a man to bind after them, usually reap two acres per day. The wheat is bound as it is cut, and set up in stocks of 12 sheaves each. Barley and oats are set up in single sheaves, provincially termed "Gatens," and as they dry are bound tightly near the bottom, and then put into stocks. Thrashing-machines are nearly universal, and most of those upon large farms are propelled by water or steam.

Cattle and Sheep.—Intimately connected with the successful prosecution of agriculture in Northumberland is the large proportion of cattle and sheep reared and fed upon the tillage-farms. Through them the soil is enriched, and manure provided for the corn-crops. The cattle are nearly all of the short-horned Durham breed, and spirited efforts are now being made for their improvement. The sheep upon the tillage-farms are nearly all improved Leicesters, or a cross between them and

the Cheviot breed. Upon the hill-pastures the Cheviot sheep prevail. The total number of sheep throughout the entire county may be estimated at 540,000, and the annual produce of wool at 10,125 packs, of 240 lbs. Two-thirds of these sheep may safely be estimated to belong to the northern division of the county.

Comparative Fertility of Soil.—In a country with a rapidly increasing population, like our own, it becomes a subject of deeply interesting enquiry whether the mode of culture at present and for some time pursued is accompanied with an increase or decrease in the fertility of the soil; and it is pleasing to be able to state, with reference to this district, that the universal opinion is in favour of a considerable increase in the productiveness of the soil since the commencement of the present century. This is attributable, probably, not so much to any one particular improvement, but to a general increase of skill and intelligence amongst agriculturists, leading them to a proper rotation of crops, a judicious application of manures, a careful selection of seed, a more complete clearing of their lands, and to a more careful general management. On comparing the present state of the agriculture of this district with the past, we are ready to admit that, in the times of Bailey and Culley, there were a few individuals nearly as far advanced in their profession as any now are; but knowledge was not then so generally diffused, and the great body of the farmers were inferior in skilful practice to the present race. It may, however, be admitted that the progress of agriculture during the last 30 years has not been so rapid as the indications of the times of Bailey seemed to promise, and it has certainly not been equal to the improvement which has been made within the same period in manufactures. This, perhaps, may in some degree be accounted for by that period of agricultural distress which was consequent on war rents and peace prices; but within the last few years there has been a revival of the spirit of improvement and emulation, which bids fair to produce important and gratifying results. The formation of an agricultural society, excluding politics, and under patronage calculated to render it permanent, is at once the fruit and the promoter of this spirit; and nothing seems wanting but a public experimental farm and a periodical journal to disseminate the knowledge of agricultural experiments and facts, to render this institution a powerful engine of improvement. Upon the minds of the rising generation of agriculturists especially it must exercise a most beneficial influence, by early directing their attention to scientific and experimental enquiries.

Though the Northumberland farmers are professionally clever and skilful, there is but a small portion of them that can strictly be considered scientific men. They are skilful in the practice more than in the science of their profession. They are mostly matter-of-fact men, whose skill is a collection of facts in their own experience and that of their neighbours, applied in daily practice by shrewd minds, without knowing the principles which give to these facts all their efficiency and importance. Thus their range of vision is limited, the whole bearing of these facts is unseen, and important truths which are involved in them are undiscovered. Here this want of a scientific education is felt by many excellent farmers; but in this point the next generation, it is hoped, will be much improved. Many of the sons of the larger farmers

are sent to public schools, and receive an education fitted to the important station for which they are destined ; but the sons of the smaller farmers must still suffer in this respect, until the system and range of country education is improved and widened.

Education.—The northern portion of Northumberland has but few endowed schools, and those not of a high character ; neither are there any public boarding-schools of much note. Education therefore is mostly conducted in common day-schools, and in charity-schools supported by the benevolence of private individuals.

The statistics of education in the town of Alnwick, which is entirely a country town and devoid of manufactures, may probably be taken as a fair average specimen of the state of education in the northern division of Northumberland, as although there are always more of the very poor to be found in towns than in small country villages, the borough free-schools and the charity-schools supported by the munificence of the Duke and Duchess of Northumberland would seem to counterbalance this preponderance. They are as follow :—

Estimated Population of Alnwick . . . 7358		
	No. who Attend.	Per-Centage Proportion.
Superior Private Schools	100	1·37
Common Day-Schools	205	2·81
Free and Charity Schools	453	6·21
Dame-Schools	74	1·1
	832	11·40
In Sunday-Schools, and not in any Day- School, estimated at }	142	1·94
	974	13·34*

In Chillingham, where the population is 487, the average number under education at the only day-school in the parish is 80, being 16 per cent., or 1 in 6 of the population. The education given in these schools is such as commonly belongs to institutions of their class. In the superior private schools, in addition to the common branches of learning, the languages are taught. In the day-schools reading, writing, English grammar, geography, arithmetic, and the elements of mathematics, and in the dame-schools reading and needlework. In the Sunday-schools religious instruction is added to reading, which renders them an invaluable accession to the cause of education. Before quitting the subject of education in this district we are compelled to confess that, although the rudiments of useful learning are taught in an efficient manner, the range of instruction, as in most other rural districts, is very limited. How long reading, writing, and ciphering will continue to receive the name of education we will not predict ; but the time must come when the training of children shall have a more full relation to the business, duties, and happiness of life. They shall then be taught not only the symbols of knowledge, but the elements of those useful arts and sciences which are likely to be connected with their future employments, and above all they will be made acquainted with the powers of their own nature, and with those laws, physical, mental, moral, and religious, the observance of which is, by their Creator, rendered necessary to their happiness.

Condition of Agricultural Labourers.—The character of the agricultural labourers in this district has long stood, and continues to stand,

* Equal to 1 in 8 of the population.

pre-eminently high as a moral, industrious, and orderly class of society. Whilst many southern counties have been deluged with pauperism and crime, the peasantry in the northern division of Northumberland have been comfortable, quiet, and contented. The causes of this striking difference merit investigation. The first that presents itself, in reference to the hinds, is their term of hiring, with the amount and the mode of their payment. The hinds are hired for 12 months, and are paid partly in kind, and partly in money; which system, by providing constant employment and a certain supply of food, gives birth to settled habits and a condition of comfort. The terms of a hind are generally as follow:—

Grass for a cow in summer, with $1\frac{1}{2}$ tons of hay and straw for its winter-food; a cottage and garth rent-free; coals led, and 1000 linear yards of potatoes set; 6 imperial bushels of wheat; 24 bushels of barley; 36 bushels of oats; and 12 bushels of beans; with 3*l.* to 4*l.* in cash.

For this he gives his own labour for 12 months, and agrees to find the farmer either one of his own family or a female servant as an out-door worker, whenever he may require her, at the rate of 8*d.* per day in winter, 10*d.* in summer, and 1*s.* 6*d.* in harvest. This latter condition is what is called the “bondage system,” and which, by a recent writer, has been unfairly compared to West Indian slavery; for those who labour under the name of bondagers are no more slaves than are the hinds who hire for 12 months, or the housemaid who engages for a half-year’s servitude. The farmer hires the hind—the hind hires the servant, on condition of her working for the farmer when he wants her labour, and all is the subject of voluntary contract, which effectually excludes the idea of slavery.* If, indeed, extended contracts of servitude made voluntarily involve the principle of slavery, then does any hiring beyond the present instant of time effectually involve it. When the term of agreement is ended the hind and his servant are both free to make fresh contracts, or none, as they think proper, and that without certificates of character from their master and clergyman. The name, however, in its popular meaning, though, perhaps, not in its etymological sense, is unhappy, and ought certainly to be exchanged for some other more appropriate and expressive. Let them be called “out-door workers,” or anything but bondagers—a name in its common acceptation ungrateful to a British ear.

From the difficulty of procuring servants, and the high wages demanded by them, the hinds have long disliked the system; and in the year 1837 a combination was formed for its extermination, which, although it produced an advance in the wages allowed by the farmer to the servants, failed in its main object. Considerable excitement prevailed, but, to the credit of the hinds, it was unaccompanied by violence or outrage. The farmers generally opposed any change of system, under the idea that without tied out-door workers, upon whom they could at all times depend, the proper culture of their farms would not be secure. There appears considerable force in this reason itself, but there seems to be some fallacy in connecting this desideratum inseparably with the old system. Most of these female servants, or bondagers, are the daughters of hinds, and if the bondage system were

* This voluntary contract is implied in the word “conditions,” which is used to denote the wages of labourers under the bondage system.

abolished they would still remain as labourers, ready to serve the farmer at fair remunerating wages. The principal change would be that they would be resident in the family of their parents instead of those of strangers; and the hind would no longer continue to receive a part of their wages in his own "conditions," but each party would get the full amount, and nothing more, of their own distinct remuneration. Those farmers who are remote from villages would endeavour to get hinds with families able and willing to meet the necessities of their farms; the hind and his family would be hired at distinct, and, in both cases, full wages, and the object of providing a regular and certain supply of outdoor workers would be as effectually attained as by the present mode.

But, recurring from this digression to the actual condition of the hind, we proceed to exhibit a statement of his annual income and expenditure, derived from personal investigation. The following statement relates to the income and expenditure of a family residing in the parish of Chillingham, consisting of father, mother, and 6 children, the eldest of whom is 16 years of age, and the youngest 3 months.

<i>Yearly Income.</i>			<i>Yearly Expenditure.</i>		
Wages of Husband—Cash .	£4	0 0	Bread	£8	7 0
6 bushels Wheat at 6s. 6d. .	1	19 0	Flour	1	10 0
24 „ Barley at 3s. 4d. .	4	0 0	Oatmeal	5	19 0
36 „ Oats at 2s. 10d. .	5	2 0	Potatoes	6	0 0
12 „ Beans at 4s. .	2	8 0	Cheese	1	0 0
1000 yards Potatoes, producing 48 bushels at 1s. 3d. .	3	0 0	Butter	1	14 8
Produce of Cow	13	3 10	Sugar	0	15 2
2 Pigs fed, average weight 4 cwts. at 2l.	8	0 0	Tea	0	10 0
Produce of Garden . . .	1	0 0	Coffee	0	8 6
Wages of Wife—say 20 days at harvest, at 2s. 6d. .	2	10 0	Milk	6	14 2
Wages of 1 son, 16 years .	16	0 0	Treacle	0	3 3
„ „ 12 „	7	16 0	Bacon	8	0 0
„ „ 10 „ , partially employed . .	2	12 0	Other flesh-meat . . .	1	0 0
Coals leading, valued at. .	2	0 0	Salt	0	6 0
House, valued at. . . .	2	10 0	Pepper	0	2 0
			Spices	0	1 6
			Tobacco	0	19 6
			Soap	0	6 0
			Candles	0	17 4
			Coals, 8 double loads at 9s. .	3	12 0
			Furniture	0	8 0
			Bedding	0	12 0
			Husband's Shoes. . . .	1	1 0
			Husband's Clothes . . .	2	17 9
			Son's Clothes, 16 years . .	3	18 9
			Two younger Boys' Clothes .	4	0 0
			Two girls' clothes . . .	3	0 0
			One ditto ditto	1	0 0
			Wife's ditto	2	10 0
			Price of 2 pigs bought in, and meal for them	2	15 0
			Schooling for children . .	1	12 6
			Books for ditto	0	7 0
			Seats at Meeting-house . .	0	8 0
			Beggars	0	2 6
			Spent at Fairs, &c., in Drink and Refreshments . . .	0	5 0
			House-Rent	2	10 0
Total	£76	0 10	Total	£75	13 7

In the preceding statement (wherein the expenditure balances the income all but 7s. 3d.) it will be observed that nothing is allowed for sickness, medicines, or other casualties, neither for depreciation or risk of capital (about 10*l.*) invested in the cow. If any calamity overtake the hind there must, therefore, be a curtailment of some of the items of expenditure, and a consequent abridgment of his comforts. The family from whom the previous estimate of income and expenditure has been derived were all well clothed and well fed, the wife being an uncommonly clever managing woman. From the circumstance of having 3 of their children at work they escaped the drawback of finding a bondager, which usually entails a loss upon the hind of 6*l.* or 7*l.* per annum, and their income and expenditure must be considered above an average. The income of a hind, who has no children able to work, whose wife only works at harvest, and who has to hire and maintain a bondager, may be considered as equivalent to 40*l.* 17s. 10d. per annum. It must, however, be borne in mind that this income is not all derived from the farmer, but a considerable part of it from the profitable application of the hind's capital and his wife's labour, in keeping a cow, feeding pigs, and growing potatoes. That portion of his income immediately derived from his employer, and which, in strictness, alone comes under the denomination of *wages*, appears to be this:—

Cash	£ 4 0 0
Corn.	13 9 0
1000 yards of potatoes, manured, set, and taken up . . .	1 13 4
Cow's grass in summer, with hay and straw in winter . .	8 0 0
Garden, valued at	0 10 0
Cottage, at	2 10 0
Coals, leading, at	2 0 0
Wife's wages, for 20 days at harvest	2 10 0

34 12 4

Loss by finding bondager 6 0 0

£28 12 4

Equivalent to 11s. per week, which, by keeping a cow, feeding 2 pigs, growing potatoes, and cultivating a garden, is augmented to a sum equal to 15s. 6d. per week. This shews how much may be added to the comforts of the agricultural labourer, without injury to the farmer, by giving him an opportunity of thus employing his little capital and the labour of his family in producing some of the most important articles of food.

Another cause of the superior condition of the agricultural labourers in this district is to be traced to the wise and enlightened administration of the Poor Laws, which, long before the new Act came into operation, has characterised this portion of Northumberland. There have never been any labour-rates, and great jealousy has always existed against extending even a temporary and very moderate portion of relief to able-bodied labourers, when accidentally thrown out of employment. This has prevented dependence upon the poor-rates, and promoted reliance upon *themselves*, thereby fostering habits of providence and economy.

Another cause is to be found in the state of education and religious instruction. The register of marriages for the last 37 years, in the

parish of Chillingham, only shews the marks of three men who were unable to write their own names. The number of females, however, unable to write, was large (23); but this defect in education has, by the exertions of recent years, been in a considerable degree remedied.

In addition to the religious instruction of the parochial clergy, there are those of the dissenting denominations, who are numerous in this district. Most of the hinds are Presbyterians, and some of them travel several miles on a Sunday morning to the religious services of their meeting-house. Few of their houses are without a Bible and some popular religious books.

The last cause that we notice is their comparative isolation. Few of the hinds in this district live in villages, but are located in cottages around the farm-stead, and with the farmer form a colony of themselves. They are generally in a considerable degree detached from the world, have no near neighbours but their fellow-labourers; no beer-shops to resort to in the evenings. They have few temptations, and are moral almost from necessity. There are several villages in this district, but these are chiefly inhabited by tradesmen, mechanics, and day-labourers. This, however, does not so strictly apply to those villages upon the Duke of Northumberland's estate, as they possess a peculiar character in having allotments, varying from half an acre to five acres, attached to the cottages, which are let to the occupiers at low rents, who in various ways, as yearly servants and as day labourers, are employed upon the adjacent farms. The object of their noble proprietor in introducing this system was to render the labourer more independent of the farmer; to enable him to get quit of the bondage condition, and generally to improve his circumstances; and so far as it has been nicely adapted in its extent to the demand for labour in the surrounding district, there can be little doubt that it has answered the proposed intentions. This principle, in fact, seems to be the grand regulator of success; for if more allotments are apportioned to one place than are equivalent to the local demand for labour, a portion of their occupants must always be unemployed, and a general reduction of wages supervene. On comparing the condition of the cottager with an allotment to that of the hind, there appears no very decided difference; the hinds' cows, grass, hay, potatoe-land, and garden, as means of profit, being nearly equal to the average of the allotments, and the wages which both derive from the farmer are not very dissimilar. But contrast the case of the cottager who has an allotment, with that of the day-labourer without land, and the advantage in favour of the former is very great. To mechanics and handicraftsmen, whose employment is in some measure uncertain, an allotment is a great boon.

The wages of a day-labourer are from 10s. to 12s. per week, excepting in hay-time and harvest, when his earnings are considerably augmented. In harvest, efficient labourers can sometimes obtain as much as 18s. or 20s. per week with their victuals.

Upon tillage-farms the shepherds have the same corn as the hinds, and a number of sheep (varying with circumstances) kept in lieu of money. On stock-farms the shepherds are principally paid by the depasturing of sheep. Some of this class are the owners of several scores.

Crime.—The number of persons charged with criminal offences, and

committed for trial, in Northumberland, were, for the seven years ending 1820, 612; 1827, 570; 1834, 719. In the year 1837 the number was 189, or 1 in 1179 of the population. There are no means of ascertaining the proportion of these belonging to the northern division, but it is believed to be very small.

Increase of Population.—According to the population returns for 1831, the rate of increase since 1821, for the whole county was 12 per cent.; but, for the northern division separately, only $5\frac{1}{2}$ per cent. In those parishes of this district, containing towns and large villages, the rate of increase was 9 per cent., whereas in parishes entirely rural, the rate of increase was only 3 per cent. This strikingly exhibits the slow numerical progress of the population of a district solely agricultural, and indicates the small increase of labour applied to the culture of the soil within the ten years antecedent to 1831.

Longevity.—The influence of rural employment, combined with a simple mode of living and a pure invigorating atmosphere, upon the duration of life, is remarkably exemplified in the following extracts from the parish registers of Chillingham and Chatton:—

<i>Population of Chillingham.</i>		<i>Burials</i>	
1801	451	In 10 years ending 1810	17
1811	301	“ “ 1820	20
1821	356	“ “ 1830	25
1831	477	In 7 years ending 1837	22
1837	487		—
	2072		84
Average Population	414	Add for Parishioners buried out of the Parish . . .	7
			91

Average annual mortality, $2\frac{1}{2}$, equal to 1 in 165 of the population. —

<i>Population of Chatton.</i>		<i>Burials</i>	
1801	1135	In 10 years ending 1810	125
1811	1378	“ “ 1820	134
1821	1460	“ “ 1830	124
1831	1632	In 7 years ending 1837	107
1837	1666		—
	7271		490
Average Population	1454		

Average annual mortality, 13, equal to 1 in 112 of the population.

These will appear the more striking when compared with the vital statistics of Alnwick—a town nearly devoid of manufactures, where the poor are generally well employed, and in seasons of severity bountifully assisted:—

<i>Population of Alnwick.</i>		<i>Burials</i>	
1801	4719	In 10 years ending 1810	1152
1811	5426	“ “ 1820	1165
1821	5927	“ “ 1830	1201
1831	6788	In 7 years ending 1837	1032
1837	7358		—
	30,218		4550
Average Population	6043		

Average annual mortality, 123, equal to 1 in 49 of the population.

In submitting these statistics of mortality we do not present them as an average of the district, but as the first that we have examined, and as opening up a field of enquiry rich in practical and beneficial results, at which we cannot now do more than glance. A portion of the difference between the ratio of mortality in towns and in rural districts is probably consequent upon increased mental excitement. But the principal efficient causes are, a less pure atmosphere; less exercise in the open air; a richer and more stimulating diet; and, above all, greater intemperance in the use of intoxicating liquors. These causes are happily capable of considerable modification and control; and when the inhabitants of towns become awake to their vital interests, these evils, with their fatal consequences, cannot fail to be diminished.

In the preceding summary, our object has been to bring the subject into view more in its prominent features than in its minute details, and to indicate obvious inferences rather than pursue them, leaving to the future, or to others, more ample and elaborate investigations. The subject, as bearing on human welfare, is one of deep interest, and the results of the previous enquiry are, upon the whole, of an encouraging and gratifying character. They exhibit a soil well cultivated under the vicissitudes and difficulties of a very variable climate, and a peasantry, who, in their general intelligence and moral habits, are a credit to themselves, an honour to the county, and an example worthy of imitation.

We have received permission to append to Mr. Hindmarsh's paper the following interesting statement by John Greg, Esq., of Dilston, in further illustration of the condition and character of the agricultural population of Northumberland. The author's position as agent to the Greenwich hospital estates in the north of England, and his long experience as an extensive practical agriculturist both in Northumberland and Scotland, well qualify him to give evidence upon the subject. The only necessary remark is that this statement was first given to the public in the year 1831, and that therefore the value of the grain, which forms a large proportion of the conditions of a hind, is now no longer the same, nor consequently the nominal or estimated amount of his earnings, although the quantity of food which he receives remains the same.

The manner of hiring and paying hinds, or farm-servants, who are householders, in the north of England, is as follows:—

Each man is provided with a cottage and small garden, upon the farm, free of rent, for himself and family; several of whom, in many cases, are engaged *for the year* upon the farm, as well as himself. The wages of the hind are chiefly paid *in kind*: those of his son or sons, if he has any able to work, either in money, or partly in money and partly in grain, as best suits his convenience: but it is generally an object with him to have such a proportion of the earnings of his family paid in kind as will keep him out of the market for such articles as meal, potatoes, cheese, bacon, milk, &c.; and, notwithstanding what the economists say about money being the only proper medium of exchange for labour, as well as other things, the custom of paying farm-labourers in kind works well for both master and servant. In times when grain sells at a high price, the conditions of the hind (as the labourer who

receives payment of his wages in kind is denominated) will cost his master more than the ordinary rate of wages for day-labourers at the same season; but on the other hand, in times of great depression, the conditions are the same, though, at such times, the farmer would be compelled to sell nearly double the produce to enable him to pay his labourers in cash. He has also a benefit in paying for his labour in an article, which otherwise would cause him some expense in sending to market, and in disposing of which he might incur the risk of making a bad debt with his corn-merchant.

The conditions of a hind (I adhere to the local terms) vary with the price of grain, from 30*l.* to 40*l.* a year, and, at the present prices, are as under:—

36 bushels of oats . . .	£6 12 0	24 pounds of wool . . .	£1 0 0
24 „ „ barley . . .	5 12 0	A cow's keep for the year .	9 0 0*
12 „ „ peas . . .	3 0 0	Cottage and garden . . .	3 0 0
3 „ „ wheat . . .	1 5 0	Coals carrying from the pit	2 0 0
3 „ „ rye . . .	0 15 0	Cash	3 10 0
36 „ „ potatoes, at } 1 <i>s.</i> 6 <i>d.</i> }	2 14 0	Total	£38 8 0

Each hind being bound to supply the labour of one woman (or boy), whenever the farmer requires it, at 1*s.* per day in harvest, and 8*d.* per day at other seasons. The other females of the family receive 10*d.* or 1*s.* a day, generally, and 2*s.* or 2*s.* 6*d.* in harvest.

The food of the peasantry in the north of England, as in Scotland, consisting chiefly of porridge made of oatmeal with milk, for breakfast, and bread, made of barley and pea-meal mixed, the above proportions are regulated to the demands of a family. Were the same mode adopted in the southern districts, although they could not probably get a more wholesome food, yet the kinds and proportions of grain would have to be regulated by the taste and habits of the people. These “conditions” are proved, in innumerable instances, to be adequate, under a proper economy (which economy the system has a tendency to produce), to the support of a man, his wife, and any ordinary number of children; for the eldest are probably earning, at the same time, from three or four to eight or nine shillings per week; and the joint produce of their labour, under the management of a frugal housewife, renders their cottage a scene of comfort and contentment. It often happens, indeed, that a hind with but few in family, has, at the end of the year, a good deal of corn to dispose of, for which, of course his master is always willing to give him the market-price.

The grain given to the hinds is always of the best that the farm produces. At the beginning of each quarter he is paid in advance a fourth part of his conditions. It is sent to one of the many small mills which abound in the country, and ground at a cheap rate into the different kinds of meal, and thus the intermediate profits of retail dealers, meal-sellers, and bakers, are saved to the consumer; and the corn, which cost the farmer 16*l.* to pay his hind, is more valuable to the latter than 20*l.* paid in money-wages, to be expended in stones of meal or quartern loaves at the end of each week. One very

* The cost of a cow's keep is usually valued at about 8*l.* to the master; but the value to the hind, or the amount which he would have to pay under ordinary circumstances, may be reckoned at 12*l.*—*Ed.*

obvious benefit arising to the hind from this mode of paying in kind, besides that of having a store of wholesome food always at command, which has not been taxed with the profits of intermediate agents, is the absence of all temptation, which the receipt of weekly wages, and the necessity of resorting to a village or town to buy provisions, holds out of spending in the ale-house some part of the money which ought to provide for the wants of the family; and to this circumstance, and to the domestic employment which their gardens afford in their leisure hours, we are probably much indebted for the remarkable sobriety and exemplary moral conduct of the peasantry of the north.

The produce of his garden, his small potatoes, and the refuse of his dairy, enable the hind to fatten two pigs in the year. The keep of a cow, supplied entirely by his master, consists of pasturage in summer, and a ton of hay, or an equivalent in turnips, and as much straw as he chooses in winter. This is reckoned to cost the farmer 9*l*.:* but if the cow be a good one, it is evident that the advantage must be much more than that to a family. The calf, if early in the season, sells for 40*s*., or thereabouts; if later, perhaps for 30*s*.; and if the good wife be a frugal manager, she will sell forty or fifty shillings' worth of butter,† besides an ample supply of milk and cheese for the use of the family. The wool received gives employment to the females to spin, and knit into stockings, in the winter evenings, or it is sent, after being spun into yarn, to be made into blankets. In this way habits of industry and economy are promoted, and domestic and social virtues engendered and preserved, in a manner and to an extent unknown in those districts where the younger members of a family are early driven from the shelter of their paternal roof and the control of a parent's eye; or where the parents, deserted by their children, are forced to take refuge, under the infirmities of age or the pressure of want, in the corrupting atmosphere of a parish workhouse. Look into one of our north-country cottages during a winter's evening, and you will probably see assembled the family group round a cheerful coal-fire,—which, by the way, is an inestimable blessing to all classes, but chiefly to the poor of this county, who enjoy an abundance of cheap fuel,—you will see the females knitting or spinning; the father, perhaps, mending shoes—an art which almost all acquire; and one of the young ones reading for the amusement of the whole circle; and contrast this with the condition of many young men employed as farm-servants in the southern counties, who being paid board-wages, club together to have their comfortless meal cooked in a neighbouring cottage, with no house to call their home, left to sleep in an out-house or hay-loft, subject to the contamination of idle companions, with no parent's eye to watch their actions, and no parent's voice to warn them of their errors; and say which situation is best calculated to promote domestic comfort, family affection, and moral rectitude.

The possession of a cow is to the northern hind an object of endeavour and ambition. He cannot marry and establish himself in life without one: at least, he knows that he ought not to marry till he can

* See the last note.

† This is understated. The value of butter sold is usually, from 50*s*. to 100*s*. In one instance it has been known to amount to 8*l*.—Ed.

purchase one, and this is the first step towards independence that is generally aimed at, salutary alike as a check and a stimulus. This point gained, a cottage respectably furnished, and a situation obtained under a good master, he brings home his bride, feeling that he is a useful, and comparatively an independent man.

The situation of a hind living upon the premises, and hired for the year, possesses this decided advantage, that in seasons when employment is scarce, when day-labourers are turned adrift, however unproductive his services may be to his master, his wages go on; even months of confinement from ill health produce no diminution in his income;—and thus it is, that though his wages per day may seem but small, yet at the end of the year he is found in better circumstances than those artisans or labourers by the piece, who, though obtaining nominally higher wages, are liable to much loss of time and uncertainty of employment. It may seem hard, at first sight, that the farmer, whose servant, after having entered upon his service for a year, has fallen ill and become unable to work, should still have to make good his bargain; but such is the custom, and were it otherwise, the family would soon, in many cases, be thrown on the parish funds. The farmer may as well then take the chance of supporting his own for a while, as be compelled to contribute to the support of all who might fall into similar circumstances throughout the parish. But by far the best reason for the custom is, that it gives rise to a feeling of gratitude to a master for having afforded gratuitous relief, and a desire, which I have often heard expressed by servants, to make up for the loss he had sustained, by the best services they could bestow; and surely the sacrifice is not too great, if it saves an honest man from the feeling of degradation, which ought, and still sometimes does attend the application for parochial support.

This mode of engaging and paying farm-servants is not only more conducive to their welfare and social comfort than the weekly payment of money-wages, which go but a little way in purchasing the necessaries for a family, are injudiciously laid out, and sometimes wastefully squandered—but it has, besides, a strong and apparent influence upon their habits and moral character; it possesses the advantage of giving to the peasant the use of a garden and a cow, with the certainty of employment; it gives him a personal interest in the produce of his master's farm, and a desire to secure it in good condition; it produces a set of local attachments, which often lead to connections, between master and servant, of long continuance. It is not a comfortable or convenient thing for a man to move from place to place, with his furniture and family;—and when he finds himself well situated, he has a strong inducement to conduct himself respectably, and give satisfaction to his employer: while, on the other hand, such removals, being attended with expense and loss of time to the farmer, who always sends his carts to bring the family and furniture of a new comer, it is his interest to encourage and retain a respectable servant, and thus mutual accommodation and respect are produced. Orderly habits and respectable conduct, on the part of the servants, produce consideration and kind treatment from their masters; and in this way the great majority of this class of our population come to the end of their days, without having once suffered the degradation of being on the list of parish paupers.

Perhaps the foregoing statements may be best proved, by annexing a list of the servants, being householders, at this time resident upon a considerable farm,* in Northumberland, with a table shewing the length of time that each has lived under the same master; and the sum of money that remained due to each at the half-yearly settlement of their accounts, at Martinmas last (11th November), being a surplus, arising from the labour of all the members of the families who remained at home, which they had not found it necessary to call for in the course of the half-year, but left in their master's hands, till the final settlement of the half-year's account :—

	Years' Service.	Cash due upon his account at Martinmas.		
		£.	s.	d.
George Cranston . . .	25	8	3	6½
Alexander Tunnah . . .	12	15	0	4½
John Redpath . . .	1	9	7	11½
Samuel Ewart . . .	30	5	5	9½
Archibald Gray . . .	9	7	14	4½
Archibald Elliott . . .	14	23	2	2
Thomas Robson . . .	4	4	3	11
James Cranston . . .	20	6	12	4½
Archibald Young . . .	12	7	2	5½
Edward Davison . . .	15	5	15	1
George Chirside . . .	10	5	16	7
John Middlemas . . .	3	4	9	10½
Thomas Fullerton . . .	18	in debt to his master 7l. 9s. 8d.		

—
Average 13 years.

In the case of Thomas Fullerton, who, instead of having money due to him, stood indebted to his master in the sum of 7l. 9s. 8d., it is necessary to remark, that he had had the misfortune to lose a valuable cow by death; and being unable to purchase another, having a large family, was obliged by his master with the loan of 10l., to enable him to do so, which loan, it is understood, he is to pay off by instalments, or as he can afford; which, as his family grows up to be useful, he will have it in his power to do. The existence of this kind of confidence and accommodation may be adduced as one of the beneficial effects of the system herein explained. A master, in such case, frequently gives the servant the use of one of his cows until he can procure one for himself; but the servant is always anxious to have the credit of having a cow of his own, and it would be absurd not to give every encouragement to the maintenance of so laudable a spirit.

It may, further, be worthy of remark, that only two in the foregoing list ever received parochial aid—1, John Redpath, who was disabled, by illness, for working, for nearly three years; and George Chirside, whose

* In the township in which the farm referred to is situate, the poor's and county rates amount (this was written in the year 1831) to 1s. 3d. per pound per annum, on the rack-rent. The greatest portion of the poor's rate, however, is occasioned by the inhabitants of a village, containing some tradespeople and artisans, who obtain settlements by servitude or occupation; and a very small proportion, indeed, by the agricultural population. The writer never knew an instance of a regularly-hired farm-servant, or hind, applying for parochial aid in time of health, however large his family; and though, in the case of widows and orphans, assistance must be given, we would say, that in townships, where the population is purely agricultural, 6d. in the pound would cover, on an average, the amount of the poor's rate.

father died, leaving a widow and four very young children, of whom he was the eldest; but since the time that he was 16 years of age the whole family have been supported by their own industry. He was at first assisted by his master in the purchase of a cow, which is now cleared off, and the family are in good circumstances.

In contrasting the condition of the peasantry in the southern with that of the northern parts of the kingdom, it would be highly improper to pass over unnoticed the superior education of the latter, and the effect which is produced by it upon their worldly circumstances, as well as upon their moral and religious character. No greater stigma can attach to parents than that of leaving their children without the means of ordinary education, and every nerve is strained to procure it. In the school attached to almost every village, children are found not only able to read and write at a very early age, but most expert in all the common rules of arithmetic, and not unfrequently capable of extracting the square and cube root with great expedition and accuracy. And even the young men, who labour in the fields all the day, often spend a couple of hours in the evening in school, to advance themselves in such acquirements. If occupation alone is a valuable antidote against idle and vicious habits, the acquirement of useful knowledge and the cultivation of the mental faculties must be still more so. And when these are prosecuted, not by gratuitous means, but by the produce of economy and toil, it bespeaks a state of society where sobriety is habitual and intelligence is held in estimation.

A Short Account of the Darton Collieries Club. By THOS. WILSON,
Esq., F.S.S.

[*Read before the Statistical Section of the British Association, 23rd August, 1838.*]

The Society, of which I propose to give a short account, must be considered purely as an experiment—as an attempt to ascertain, in certain circumstances, on what terms a miner might ensure himself and his family a certain relief during sickness arising from accident.

Friendly societies, or associations for the relief of their subscribers, have been extensively popular with the working classes. Notwithstanding the great good which they have undoubtedly effected, it must still be a matter of regret that they are not based on sounder principles, and that they are not more fully adequate to the wants of their subscribers. It is not, however, intended to direct the attention of the Section to their defects in general; but I may be permitted to suggest that there is here a wide field for the statistician and philanthropist, to collect those facts which are necessary for placing friendly societies on a sound basis, and which, though they have been refused to the commands of the legislature, may be yielded to the importunities of neighbours and friends. It will be necessary only to point out two defects that friendly societies generally possess, as regards miners; in the first place, they often exclude that class altogether, and in the next place, from the high rate of subscription, the assistance of these clubs can be obtained only by heads of families, or at least by adults. Now every child that is employed about a mine is exposed to great dangers; it is therefore most desirable to provide assistance for the sufferer of this age, and to

endeavour to establish, if possible, some data for general assurance. If any attempts of this kind have been made, they have not I believe been published; and therefore it is hoped, that this very humble attempt may not be without its use, in the great seat of mining operations, by drawing attention to the subject, and by establishing a rough rule by which to commence.

The Darton club was established in February, 1833, "for the relief of its members, during any illness that might arise from accidents happening to them while at work at the colliery." The rules were printed, and the accounts have been kept by the employer; the subscriptions are deducted from the wages, and the meetings are held at the colliery, so that all expenses are avoided, and the funds may be considered as wholly applied to the purposes of relief.

A member whose wages are under 7*s.* a week pays 6*d.* on entrance, and one halfpenny per week subscription; and receives when ill 3*s.* 6*d.* per week, so long as the illness continues: all whose wages exceed 7*s.* per week pay 1*s.* on entrance, one penny per week, and receive when ill 7*s.* per week.

It may perhaps be thought that this rate of allowance is too large for the subscription, and such were the fears expressed to the miners at the outset; they however were unwilling to have it lower, and promised to double their subscription if it were necessary. The result has proved that, in the particular locality of the club, the subscriptions are quite adequate to the allowance; and as the club has had a season of adversity as well as of prosperity, and has now a considerable surplus fund, it may perhaps be considered as resting on safe grounds.

Years.	Average.	No. of Subscribers.		No. of Accidents on which Payment has been made.
		Minimum.	Maximum.	
1833	107	93	125	5
1834	158	115	232	33
1835	212	197	228	52
1836	224	200	243	45
1837	245	217	272	53
1838	277	262	289	22

Of the accidents, 3 have been fatal.

	Receipts.			Payments.		
	£.	s.	d.	£.	s.	d.
1833	24	7	11	7	14	0
1834	41	9	2½	24	14	0
1835	47	3	3	40	7	4
1836	52	8	1	51	9	6
1837	56	12	8	72	16	0
1838	36	12	7	11	2	0

Total . . . £258 13 8½ £208 2 10

Out of which one individual received 14*l.* 14*s.* The balance remaining is 50*l.* 10*s.* 10½*d.*

It will be seen that, in the years 1836 and 1837, the club, which had been hitherto saving, began to lose. This is accounted for by the opening at that time of a new pit, in which the roof was much more tender, and the accidents from this cause are found to be very numerous; in 1838 the men became more used to the work and more careful, and the roof perhaps rather better; and the club, having carried them over the

dangerous time, is now gaining. The superiority of a club for insurance over a free-gift club, where the money is only collected as it is wanted, is here strikingly shewn. It would have been impossible to have raised the heavy payments required in 1836 and 1837, which amounted to 123*l*.

I find that no account of the cause and nature of the accidents was kept previous to July, 1836, since which time 96 accidents have occurred, which have been chargeable to the club. Of these 90 have been reported, with their causes, of which the following is a statement:—

25	from the roof falling.
20	from the coals falling.
19	from corves hurting them.
6	from falls.
7	from wounds from tools.
8	from various things falling on them.
5	from fire-damp.

Total . 90

An Account of the Situation of a Portion of the Labouring Classes in the Township of Hyde, Cheshire. By W. FELKIN, Esq., F.S.S.

[Read before the Statistical Section of the British Association, 24th August, 1838.]

THE writer, in addressing to the working class some practical observations on the importance of a wise and careful appropriation of their wages (which appeared in connection with a paper read to the Statistical Section of the Association last year), referred to several points which are so completely established by the facts narrated in the following pages, that he is induced to hope the present paper may prove a useful addition to his former remarks, by stimulating employers to a careful consideration of the extent of their responsibility for the welfare of the people more immediately dependent upon them, and those who are employed to a strong and paramount conviction of the power they possess to modify their own condition in society, and in many cases to secure a comfortable independence.

The following is an abstract of the Annual Report for the year ending March, 1838, made by the Overseers of the Poor of the Township of Hyde, in Cheshire, with some explanatory statements, the result of a recent personal enquiry:—

There was paid to 4 men resident within the Township	£26	10	6
5 Women	29	14	4

Total . 9 Paupers, living in Hyde, belonging to the place.

There was also paid on account of	1 Woman Deceased	3	3	0
	2 Men ditto	11	19	6
	2 Men in Asylums	18	8	5
	1 Woman ditto	1	18	3
	1 Vagrant Man	0	7	6
	9 Women living elsewhere	40	0	10
	8 Men ditto ditto	75	1	6

Total . 33 cases, relieved by payments amounting to . £207 3 10

These paupers consisted of 18 men and 15 women—amongst the latter

of whom were 4 widows.—The names and residences are given throughout these accounts. As, for instance, 15 fathers are named who paid 62*l.* 13*s.* for their illegitimate children; and 16 mothers are named who received 64*l.* 12*s.* 10*d.* on account of such children. Thus the rate-payers are enabled to exercise due vigilance and control in the disposal of the poor's rate, and the publicity given, in cases of immorality, has a beneficial effect.

	£.	s.	d.
Paid in relief to regular and casual poor.	207	3	10
Law Expenses	7	8	11
Removals, &c.	7	4	6
Surgeons' Bills.	3	3	0
Cottage Workhouse	6	13	6
Assistant Overseer and Sundries	84	19	0

The total amount expended in connection with the }
 poor of this township, in 1837-8, was. . . . } £316 12 9

The accounts are signed, printed, and circulated in the usual way by the overseers.

This township contained, in 1800, 830 inhabitants; at present there are upwards of 11,000.—The poor's rate in 1800 was 12*s.*, in 1837, 6*d.*, per head per annum.—The inhabitants of Hyde are chiefly employed in factories for spinning common yarns and weaving power-loom cloth, in coal-mining to supply fuel for working these mills, and in the ordinary retail business of a small market-town.

The highway rate, owing to the increase of the town, and the necessity for forming and paving new streets, was 750*l.* for the year 1837-8. No paupers are employed upon the roads.

So unusually light an assessment for the poor as that above quoted could not fail to induce me to endeavour to ascertain the habits and condition of the working population of the place. I was favoured with a full opportunity for enquiring into the details of one factory, and seeing the work-people while at labour, as well as visiting some scores of their dwellings, chiefly during and after the hour of dinner. The following results I am enabled to offer to the Section, as calculated to explain the phenomenon of an almost entire absence of pauperism in this population. The hands employed in the works I visited were from 1500 to 1600. In several other establishments, the property of other members of the same family, conducted in the main upon the same principles, there are about 4500 hands. The machinery in these various mills requires thirty-five steam-engines to propel it. The wages, condition, and habits of the work-people throughout the whole of the works alluded to, I understand to be very similar; those least intermixed with the town population being most independent and happy.

The 1500 to 1600 hands first mentioned received on an average 1000*l.* a week, paid fortnightly; viz. 3*s.* to 5*s.* children, 12*s.* women, and 24*s.* to 25*s.* men; the exact weekly earnings had been ascertained to be 12*s.* 6*d.* throughout the whole. A page of 73 names of men, taken at random by me from the employer's wage-book, shewed on a fair average of earnings a total for a fortnight of 229*l.*, which is 31*s.* 4*d.* a week for each man, or 78*l.* 15*s.* a year. The average earnings of 120 families (those of whose members were able to labour being wholly-employed in these

works) were found to be equal to 6s. 10¹/₂d. per head per week, including every individual in them. The income of each of these families was about 100*l.* a year. Some families were so large, and so many of the children were at work, that the income of each was 200*l.* to 300*l.* a year; and one workman's family received upwards of 400*l.* per annum. In this factory 48,000 lb. weight of cotton wool is weekly spun into yarn, of the average of No. 24, and wrought by 1200 power-loom (working at the rate of 125 shoots a minute) into 1500 pieces of 25 yards long a day, or 20 miles in length of cloth, averaging a yard in width. But few changes take place amongst the hands; and upon recently taking an accurate census of them, it was ascertained that none had ever been pauperised, or had any relative living in the place who had received parish relief. Only 3 committals for felonies had taken place from amongst the hands employed here during 35 years, and these were of minor importance.—Two intervals of 8 days each take place every year during which these works stop, and which are often employed by the men in going from home to London, Liverpool, the Isle of Man, or elsewhere; which excursions are found highly beneficial, the people always returning more contented with their circumstances and homes than when they quitted them. The appearance of the people is on the whole healthy, and as clean as the nature of their various occupations will admit. The warp-preparers, working in a heat of about 80 degrees, are fine-looking stout men, and average only half a day's sickness each in the year. Clubs for sickness and for burial are established amongst the separate classes. I saw one person deformed, who was so from his birth, and a youth who was rickety; the women were well grown, and everybody looked cheerful, both in the factory and in their dwellings, so far as my visits extended.—Great freedom was shewn in the intercourse of the people with their employers, but it seemed the result of friendly regard and confidence rather than disrespect.—Illegitimacy is increasingly rare; external decency is more apparent.—The hands who live, as it has been well expressed, “a week too fast,” and are always more or less indebted to the shopkeeper, are numerous, though the number is decidedly lessening. I saw some families who had never been out of debt to the same tradesmen during 30 years, and these were among the best-paid work-people. Several hundred houses have been built by the proprietor for his people; there is amongst these only one public-house,—no beer, nor spirit, nor pawnshop; but drunkenness, though decreasing, still prevails in many cases. Thriftiness, upon the whole, is on the increase. Ten of the men whose names were given me have built out of their savings 46 freehold houses, bringing them in an average rent of 7*l.* 10*s.* a year each dwelling; and a list of others is preparing, which will amount, it is believed, to 200 or 300 houses more, the property of 30 or 40 spinners and weavers not above referred to. Two cases may be given as examples: one young woman was pointed out, who, being an orphan and originally destitute, had saved and laid out on mortgage upwards of 100*l.*, and had just before my visit married respectably. A man who had not received high wages, and whose wife had from infirmity been carried to bed by him for more than twenty years, having brought up seven children (the oldest daughter being employed in household

affairs constantly), has been possessed of 7 houses for some time, which bring him in 50 guineas a year. He is infirm now, and does not labour, having what is for him a competency. Indeed, he finds the means frequently to present something to his children, as an encouragement to similar thriftiness on their part. The houses built by both masters and workmen are good, convenient, and in almost every instance entire, having separate and private yards behind them. Scarcely any gardens are attached, and but few flowers were seen in the houses, although in the summer season. Water is laid into each dwelling.—Those constructed by the men are, in many cases, rather more substantial and somewhat larger than those belonging to the masters. They usually consist of a lofty front sitting-room or house-place, a back kitchen and scullery, and two or three bed-rooms up stairs. I found them, in nearly every instance, more or less clean, according to the general character for foresight and temperance of the inhabitants. Almost all were full of good furniture—many pictures, some good ones, were in every parlour.—Samplers, beautifully worked, were commonly met with, framed and glazed; and the people wore superior clothing, were well shod; and those who were at dinner were partaking of substantial food, chiefly meat with potatoes. Though most of the women are able to wash, make and mend clothes, make their own bread, and do general household work, yet I thought their cottage economy and cleanliness susceptible of considerable improvement, by increased order, and avoiding unnecessary waste in food. Benevolence is in active exercise amongst the people, and cases of sudden bereavement and distress are promptly met by their giving the requisite assistance and advice. Musical instruments were common; in one house there was a piano, elsewhere there were others, altogether forming a musical band, and in one dwelling I met with a piano-forte, two violins, and a violoncello. No house that I went into was without the whole Bible or a New Testament; most of them had both religious and political books, which appeared to have been frequently used. An infant and day school supplied means of sound instruction, through competent masters, and the master of the school in which the factory children were taught had been giving evening lectures upon some popular and useful subjects—a task for which he appeared sufficiently qualified. I and a friend examined the scholars, and were satisfied they had acquired a fair amount of moral as well as of merely literary information. The children attended with considerable regularity, and most of the parents manifested, we were informed, great desire for the education of their families.—Vacant situations in the works were filled almost invariably by aspirants from amongst the hands regularly employed.—There appeared less coercive restraint upon these hands, in the form of regulations, than is usual in the management of factories; the imposition of fines on a prescribed system had been found to work very unsatisfactorily, and was entirely abandoned. Each case was dealt with on its own merits, and the work-people were encouraged, admonished, or dismissed, strictly deciding according to his or her merits or demerits in a profitable point of view. Beyond this, little or no interference seems to have taken place on the part of the employers, in regard to the moral habits or individual conduct of their people. They however undoubtedly exercise

a very beneficial influence over them, by the kindness and integrity of their personal character, as well as by the anxiety they manifest to promote the people's happiness; and which have co-operated with regular employment and good wages to bring about amongst them the remarkable state of things just described.

In two other manufacturing communities, distant from the above, and consisting of about 1500 persons each, which I have recently visited, placed in more isolated situations than that of Hyde, and more directly under the eye and control of the proprietors of the respective works, the state of the people was, if anything, more satisfactory. In the one the trade of the only public-house is decaying; in the other there was a small beer-shop, which is likely to disappear very soon; but there were no dram or pawn shops. Excellent schools were flourishing in both; and in both drunkenness and profane language were "very unfashionable."—I heard many delightful instances of extraordinary and self-denying benevolence on the part of the work-people towards the afflicted, the widow, and orphan; while I found their houses clean, and filled with furniture of a very superior quality. Crimes against persons or property had been very rare, and scarcely a case of illegitimacy had occurred in either community for years.—A house was not entered where there was not the Bible or New Testament; generally, there were many other books of devotion and various political and scientific works; many of the inmates were musical,—and almost all were thrifty and independent.—Pauperism was nearly unknown. In each of these cases the employment was regular and well paid, and nothing could be more corroborative than the statistics of these communities (were they set forth at large) of the opinion which I have formed, after extended enquiry and observation, that the same benevolent and pure example set by employers for the imitation of their work-people, when the latter are not constantly subjected to the baneful influence of a dissipated town population, and are sufficiently remunerated for their labour, will produce similar desirable effects in the restraint of vice, the encouragement of virtue, and the promotion of happiness; and that these results will be evidenced by the very best test—the absence of pauperism.

A Statistical Report from the Parish of Bellingham in the County of Northumberland. By W. H. CHARLTON, Esq.

[Read before the Statistical Section of the British Association, 24th August, 1838.]

HAVING been requested to draw up some statistical information respecting an agricultural village or district, I have selected the parish of Bellingham, in which I reside, although, since by far the greater portion of the land is composed of moors and sheep-walks, the parish can scarcely be denominated agricultural. The facility, however, of obtaining information so near home, the distance of any village or district *purely agricultural*, and above all the belief, that the circumstances of the parish of Bellingham bear a considerable resemblance to those of several other parishes in the western parts of Northumberland, and may therefore be useful in giving a general idea of their state, have induced me to offer such returns as I have been able to collect.

The parish of Bellingham is situated in the west of Northumberland,

and is divided unequally by the valley of the North Tyne River. On the northern side of this valley the hills obtain a height of about 1200 feet above the sea, on the southern side little more than 800 feet. The general aspect of the country is mountainous and barren; the hills being mostly covered with heath or coarse grass, and the cultivation chiefly confined to the alluvial lands bordering upon the river. The parish possesses several excellent quarries of freestone, one or two of which are of a very fine quality. The beds of limestone, though of tolerable quality, are generally thin: there are 5 lime-kilns, only one of which is in operation for the general sale of lime.

The coal-seams are very inferior in quality to most of those opened to the eastward; those which are worked vary in thickness from about 20 inches to 3 feet. There are 4 coal-pits now worked for sale, all on the north side of the Tyne; the workings are conducted on the smallest possible scale, and they do not altogether give employment to above 15 or 20 men and boys. The price of coals at the pit is about 2s. the cart-load, or 6d. the horse-load.

In the north-western extremity of the parish a trial is at present making for lead, in a place where the same attempt has several times been made before; but as yet no vein likely to pay the expense of working has been discovered.

Iron-stone is tolerably abundant, and some of it probably of good quality: none of it however is worked for the ore, though some is quarried for road materials.

The length of roads kept up by the 6 townships into which the parish is divided may be about 16 miles; the length of turnpike-roads in the parish about 3 miles. The roads were, till within the last few years, of the same wretched description as the greatest part of the township-roads in this county; and though some portions are at present considerably improved, others still exhibit lamentable proofs of the inefficiency of the law which confides the care of so important an object as a public highway to some ignorant farmer under the name of a surveyor. Two townships in the parish have been united for about a year and a half with another township out of the parish, forming a district under the provisions of the New Highway Act, with a salaried surveyor. It is scarcely necessary to add, that the roads within this district are in better repair than those of the other townships; but unfortunately this union being voluntary and not compulsory on the part of any township, these three were the only townships in the whole of the surrounding country which could be induced to unite.

The population of the parish, according to the returns for the general census in 1831, was 1460 persons. The returns for the census of 1821 gave 1396, so that the population increased at the rate of $4\frac{1}{2}$ per cent. between 1821 and 1831. In 1831 the declared annual value of the parish was 6435*l*.

The expenditure in poor-rates is considerable; the sum expended during the three years previous to 25th March, 1836, averaged 681*l*. per annum. In October, 1836, the parish was, with several others, formed into a union by the Poor Law Commissioners, since which time, by the substitution of one uniform system of management under a Board of Guardians, for the short-sighted and unconnected modes of administering

relief which prevailed in the different townships under the old law, a considerable reduction in the annual expenditure on the poor has already taken place, the expenditure for the year ending 25th March, 1838, being 603*l.*, shewing a reduction of 78*l.* per annum, or 11½ per cent., though the union is as yet unprovided with that most essential part of the machinery, a workhouse. The operation of the new law has caused no hardship to the really deserving poor, many of whose allowances have been increased, while a better spirit seems to animate the labouring classes, who now again begin to look upon a dependence on the poor-rates in its true light, as a refuge from destitution, and as a last resource, when all exertions to support themselves have failed.

I now proceed to answer, in the order in which they occur, such of the queries put forth by the Statistical Society of London as have been found applicable to this parish and district.

1. The number of acres of land in the parish is about 18,000.
2. The number of farms in the parish is about 77.
3. The mode of letting the land is generally from year to year.
4. The size of the several farms varies from 800 to 20 acres.
5. The soil is generally light, rather sandy in the valleys; black peat earth upon the hills.
6. The subsoil is partly cold clay, and partly sand.
7. The depth of soil varies from about 1 inch to 2 feet.
8. The state of drainage is generally very bad, although some improvement has of late been made in this respect.
9. The number of acres under the plough is 1582.
10. The usual course of crops is oats after grass, then fallow or green crop, then wheat or barley sown down with grass seeds.
11. The number of acres of pasture is 2200.
12. The number of acres of meadow-land is 1440.
13. The number of acres of wood and coppice is 200.
14. The woods consist of all kinds of forest-trees; those which seem to thrive best are the ash, the elm, the Scotch fir, and the spruce fir.
17. The number of acres of common, marsh, &c., not previously specified, is 12,578.
18. The average annual quantity of hay is 1440 acres of natural grass, or meadow-hay, and 800 acres of artificial grass.
19. The number of acres planted with wheat in 1835 was 200.
20. The same of barley, 300.
21. The same of oats, 400.
22. The same of rye, 50.
- 23 & 24. The same of beans and peas—40 acres of peas, of beans *none*.
33. The quantity of seed of each different kind of grain per acre is, wheat, 2½ Winchester bushels; oats, 5; barley, 3½; peas, 3.
34. The average annual quantity produced of each kind of grain respectively per acre is, wheat, 22 Winchester bushels; oats, 30; barley, 35; peas, 15.
35. The number of acres sown with potatoes in 1835 was 38; the average weight of the produce per acre was 620 stones.
36. The number of acres under fallow in 1835 was 400; 200 sown with turnips, of which 100 were drawn off and 100 fed off with sheep.
39. The number of horses employed for agricultural purposes is 119.

40. The number of horses employed for other purposes is 10 breeding-horses, and 6 or 7 pleasure-horses.

42. The number of grazing cattle, exclusive of milch cows, is 50.

43. The number of milch cows, 460.

44. The number of calves bred in the year, 410 for rearing, 50 for meat.

45. The number of sheep of the long wool breed, 22; average weight of the fleece, 7 lbs. per fleece.

46. The number of short-wooled sheep, 5080; average weight of the fleece, 3 lbs. per fleece.

47. The number of lambs of all descriptions bred in the year, 1150 reared, 300 for meat, and 850 for rearing.

49. The number of sheep shorn in the year, 4800.

50. The quantity and description of cheese made in a year, 1120 cheeses,—old Milch cheese.

51. The quantity and description of butter made in a year, 300 firkins, 56 lbs. of butter per firkin.

52. The usual rate for labour in summer and winter respectively; 2s. 6d. in summer, 2s. in winter, for common labourers. Women employed as day-labourers are paid for ordinary work in the fields at the rate of 9d. or 10d. per day, except in harvest, when they have at least 2s. Children have about 6d. for ordinary work, and about 1s. in harvest. Women farm-servants are hired by the half-year, generally in May and November; they receive about 6l. 10s. for the summer half, and 3l. for the winter half-year. A male farm-servant, or hind, is usually hired by the year, and receives from 12s. to 13s. per week, with a house rent-free. The bondage system, so common in the northern and eastern parts of this county, is seldom adopted here; but if the hind have a family they are generally expected to assist in the labour on the farm, particularly at hay-time and harvest. Shepherds are always paid in kind, having a portion of the stock set apart for their own use and profit, often 40 or 50 sheep, and a cow or two.

In the parish of Bellingham there are, I think, no farms which can be called exclusively pasture, or sheep-farms, but higher up the country they are both numerous and extensive. One sheep-farmer in an adjoining parish pays a rent of 360l. per annum. The highest rental of any farm in the parish of Bellingham is about 260l. per annum, the farm being partly pastoral and partly agricultural. About 12,000 acres of the parish are common, over which the adjoining landowners and tenants possess an unlimited right of pasturage. The farm-houses are mostly substantial buildings of freestone, consisting of a parlour, kitchen, back kitchen, dairy, &c., on the ground-floor. The outbuildings, cow-houses, stables, &c., are seldom in good condition, and a want of neatness and cleanliness is too apparent throughout. The labourers' cottages are also of freestone, and many of them rudely built. Most of the older cottages are thatched with heath, and contain but one room, with a small closet, which serves for a dairy or milk-house, as it is called in the country. As fuel is plentiful, a large fire, generally of coal, but sometimes of peat, is kept burning during winter and summer. The window is scarcely ever opened, and the doors, at least the outer door, seldom shut. Some of the more modern cottages possess two rooms, one of which is a sort of parlour. The older farm-houses are roofed with grey slate, a sort of

freestone flag from the neighbourhood ; but of late years, in roofing both farm-houses and cottages, the Welsh and Cumberland slates have taken the place of every other covering. The females of the farmer's family take but little active part in the dairy or poultry department, but pass most of their time within doors, and present, in their pale faces and indolent appearance, a striking contrast to the fresh complexions, and active habits, of the same class of females in the adjoining county of Cumberland. In both the farm-houses and cottages a considerable degree of cleanliness and comfort prevails within doors, which is far from being generally the case without; if a garden exist, it is probably in a neglected state, and a heap of manure forms a conspicuous ornament in the front of the building.

There is little crime, unless an occasional attempt at poaching, and the stealing of a few turnips or potatoes, deserves that name ; and it is worthy of remark that although the inhabitants of the valley of the North Tyne, in which this parish is situated, possessed, less than three centuries ago, a deservedly bad reputation for lawlessness and violence, a more peaceful people is probably not to be found at present in Great Britain ; assaults, except of the most trivial kind, are extremely rare, and such a thing as a fight is almost unheard of. Drunkenness, however, is unfortunately but too common among the male part of the population.

A remarkable change has taken place within the last 20 or 30 years, in the kind of bread eaten by the lower classes ; before that period oat-cake was almost universally used, but it has since been entirely supplanted by a flat cake, about half an inch in thickness, made of barley and peas. A white wheaten cake is brought out as a delicacy, but the brown loaf, so common in Yorkshire, is here unknown. The poorer class of labourers seldom taste meat (except perhaps a little bacon once or twice a week), but live upon oatmeal porridge, barley-bread, potatoes, cheese, and milk. I shall here present a view of the income and expenditure of two individuals ; the first a hind, or farm-servant ; the second a common labourer ; premising that the two persons whom I have selected are quite as well off as the best of their class in the parish.

1. *The Hind*.—The number of inmates in the hind's family is 4, consisting of himself, his wife, and two children. The usual money-earnings per week are, of husband, 8s. ; of wife, 1s. 6d. ; of children, 2s. 6d. ; total 12s. The hind has besides, as part of his wages, a cow, and fodder for her keep, the value of which may be reckoned at 4s. per week, so as to make the weekly income 16s. Total receipts of the whole family by the year, 41*l.* 12s. The weekly expenditure is as follows : bread, 4s. ; flour, 2s. ; cheese, 2d. ; fresh meat, 8d. ; tea, 6d. ; coffee, 6d. ; sugar, 8d. ; fuel, 6d. ; soap, 4d. ; candles, 1d. ; schooling, 6d. ; miscellaneous, 1s. Total ordinary weekly expenditure, 10s. 11d. Total aggregate of weekly expenditure, 28*l.* 7s. 8d. Yearly expenditure : shoes, 2*l.* ; other articles of clothing, 5*l.* ; furniture and bedding, 5s. ; miscellaneous, 2*l.* Total yearly expenditure, 37*l.* 12s. 8d. Quantity of potatoes raised and consumed at home, 48 bushels. Pig weighing about 18 stone ; house, and keep for cow free, and coals carried for him.

2. *The Labourer*.—Number of family 8, consisting of himself, his wife, and 6 children. Usual weekly earnings of husband, 12s. ; of wife,

1s.; of children, 1s.; total, 14s. Total income per annum, 36*l.* 8s. Weekly expenditure, bread, 6s.; flour, 2s.; cheese, 6*d.*; meat, 6*d.*; 5*d.*; coffee, 3½*d.*; milk, 6*d.*; sugar, 8*d.*; fuel, 10*d.*; soap, 3½*d.*; candles, 2*d.*; schooling, 5*d.*; miscellaneous, 6*d.*; total, 13s. 1*d.* Yearly aggregate of weekly expenditure, 34*l.* 0s. 4*d.* Yearly expenditure: shoes, 20s.; other articles of clothing, 20s.; miscellaneous, 20s. Total yearly expenditure, 37*l.* 1s. 4*d.* Quantity of potatoes raised and consumed at home, 30 bushels; house free; but no coals carried, nor cow kept for him.

The following is a statement of the stock killed, or fatted for killing, on a farm in the parish of Bellingham, during the last year, 1837:—

Fatted in the year: cows, 1; wether sheep, 90; pigs for pork, 1; pigs for bacon, 5. Killed for consumption in the parish or district, cows, 1; wether sheep, 8; pigs for bacon, 2. Average weight when killed, cow, 40 stone; wether sheep, 60 lbs.; pigs for pork, 5 stone each; pigs for bacon, 17 stone each. Average price for the year when fat, cow, 5s. 6*d.* per stone; wether sheep, 25s. each; pigs for pork, 6s. 6*d.* per stone; pigs for bacon, 5s. 6*d.* per stone. Average price for the year when lean, cow, 3s. 6*d.* per stone; wether sheep, 17s. each; pigs for pork, 4s. per stone; pigs for bacon, 3s. per stone.

The next is a statement of the agricultural crops on the same farm for 1837, the measure of the produce being given in Winchester bushels: average weight of the quantity contained in such measure, wheat, 63 lbs.; barley, 56 lbs.; oats, 45 lbs.; potatoes, 70 lbs.: average crop per statute acre in the year, wheat, 30 bushels; barley, 40 bushels; oats, 30 bushels; potatoes, 80 bushels; greatest crop per statute acre in the year, wheat, 34 bushels; barley, 50 bushels; oats, 45 bushels; potatoes, 90 bushels. Number of acres planted or sown with each crop; wheat, 6 acres; barley, 10 acres; oats, 14 acres; potatoes, 1 acre; measure of turnips, fother of 24 bushels; average weight of the quantity contained in such measure, 96 stones; average crop per statute acre in the year, 20 fother; greatest crop per statute acre, 30 fother; number of acres planted, 6 acres; meadow-hay, average crop per statute acre, in the year 1837, 1½ tons; greatest crop, 2 tons; number of acres sown, 20 acres; clover-hay, average crop per statute acre in the year, 1½ tons; greatest crop, 1½ tons; number of acres sown, 12 acres. Average price for the year, wheat, 8s. 6*d.* per bushel; barley, 14s. ditto; oats, 3s. ditto; potatoes, 1s. 3*d.* ditto; turnips, 1*d.* per stone; meadow-hay, 40s. per ton; clover-hay, 60s. per ton. It must be observed, that the land on this farm (about 240 acres) is of a superior quality to the average quality of land in the parish.

I have before alluded to the prevalence of pauperism, and to the large amount of the expenditure in poor-rates within a year or two of the present time: the same remark may apply to the whole of the surrounding country, especially to the westward. Pauperism seems to have taken deeper root in the pastoral than in the agricultural districts of Northumberland, for in the two Poor Law Unions formed in the most exclusively pastoral parts of Northumberland, viz., the Rothbury and Bellingham unions, the previous annual expenditure was between 9s. and 10s. per head on the population, whereas in the other unions in the same county it varied from about 6s. to 8s., so that the western parts of this county have had but little reason to flatter themselves that an

improved administration of the Poor Law was not imperatively called for among them. There is now but little mendicancy or vagrancy, owing in a great measure to the establishment of a species of police in the parish and the surrounding district, by an association which was formed about five years ago, at first for the preservation of game, but which has latterly embraced the protection of persons and property in general. Those who know that in most country parishes the common constable is usually a useless, and often a worse than useless personage, will appreciate the utility of a paid rural police, and join in hoping that a measure instituting a force of this description may shortly occupy the attention of Parliament, and be established throughout the kingdom.

Before concluding, a few words may be added on the subject of education, although I confess that my information on this head is by no means so perfect as I could wish. There are seven schools in the parish, four of which are in the village of Bellingham. One of these last has a foundation. The number of children attending the different schools is greater in winter than in summer, and may in the former season average about 150. The pupils pay on an average about 5s. per quarter. The nature of the instruction varies of course according to the acquirements of the master, who can generally write a good hand and is an adept at accounts; Geography and English Grammar are frequently taught; and I believe there is now one schoolmaster in Bellingham who professes to teach the Latin Classics. An undue stress seems to be laid on the higher branches of arithmetic (as algebra), which can be of little use in after-life to the greater part of the scholars. I may mention that there are very few among the younger part of the population who cannot both read and write; the proportion of those who can neither read nor write to those who can at least read may be about 1 in 30. I must again repeat my regret at the very imperfect details I can at present furnish upon so important a subject as the education of the people; and conclude by assuring the Section, that it is a point to which, in future, I hope to be able to give my earnest attention; as it is by exhibiting the real condition and wants of England in this respect, that a hope may be entertained of the public mind being at last thoroughly awakened to the importance of the subject.

Abstract of Outline of Subjects for Statistical Enquiries. By SAMUEL HARE, Esq., President of the Leeds Statistical Society.

[*Read before the Statistical Section of the British Association, 24th August, 1838.*]

MR. HARE read some prefatory remarks on "an Outline of Subjects for Statistical Enquiries," in which he observed how much the importance and value of Statistical Societies would be augmented by a strict attention, so far as is practicable, to uniformity in the designs they have in view; by a general agreement in reference to the principles on which they are based, the terms and numerals employed in their investigations, and the documents necessary to their elucidation.

With a view to the attainment of these desirable objects, Mr. Hare has sketched an Outline of the Subjects of Enquiry, comprising a series of tables, intended to be subsequently filled up by different Societies;

the arrangement of which subjects, though necessarily complex, are classified in a comprehensive, yet condensed manner.

It consists of,—

- I. Physical Statistics; relating to Topography, &c.
- II. Vital Statistics; relating to the Physical Being of Man.
- III. Mental Statistics; relating to the Intellectual and Moral Being of Man.
- IV. Economic Statistics; relating to the Social Condition of Man.
- V. Miscellaneous.

Under the above heads are comprised,—

1. Topography, Geology, Meteorology.
2. Births, Marriages, Deaths, Population, and Medical Statistics.
3. Education, Adult Instruction, Ecclesiastical Institutions, and Criminal Statistics.
4. Real and Personal Property, Manufactures, Trade, Commerce, Transit of Goods, Municipality, Agriculture, &c.
5. Various Subjects, not embraced in the foregoing.

From the above tables, of which there are upwards of 120, each town, where a Society is established, may have the necessary number and description of papers which its peculiar locality may require.

A Statistical Table of Crime in Ireland. By J. KINGSLEY, Esq.

[*Read before the Statistical Section of the British Association, 24th August, 1838.*]

As Mr. Kingsley states in his explanatory remarks on the table, which he offers as a formula for the Criminal Returns of the Empire, that, “seeking to establish a principle, he does not hold himself responsible for the accuracy of the particulars in the return,” it would not be expedient to publish the table at length; but it may be stated that the peculiarity of the form consists in separating the cities from the counties, and arranging them both in the order of their respective population, with separate columns for each of the following heads:—

1. Population of each County or City.
2. Number of Souls to the square mile.
3. Comparative Standard; Carlow the least populous County, being rated as one crime.
4. Names of Counties in order of population.
5. Offences against the Person.
6. “ Property with violence.
7. “ “ without violence.
8. Offences (Malicious) against Property.
9. “ against the Currency and Forgery.
10. “ not included in the foregoing.
11. Total of all Offences.
12. Deaths.
13. Free Pardon.
14. Executions.
15. Petty Sessions Courts.
16. General Sessions Courts.
17. Assize Courts.

On the Sickness and Mortality among the Troops in the West Indies.

Prepared from Official Documents, by Capt. A. M. TULLOCH, F.S.S., &c. &c. Part III.—(Concluded from p. 230).

IN our two former articles we have shown the influence of the climate of the West Indies on the health of white troops alone; we shall now proceed to investigate its effect on the negro race, of which the black troops are especially composed.

In this portion of our investigation we labour under the difficulty of possessing no information regarding the mortality to which this class of men are subject in their native country, which is the only correct standard whereby we can estimate with any degree of accuracy, the influence of other climates on their constitutions. So far as statistical enquiries have extended, however, there is no country, either temperate or tropical, in which the mortality among the indigenous civil inhabitants between the ages of 20 and 40 seems materially to exceed 15 per 1000 annually; and probably there is no country where troops composed of the indigenous inhabitants are subject to a higher rate. As an instance we may mention, that among the Malta Fencibles, composed of the natives of that island, the average mortality does not exceed 9 per 1000 annually; and among the Cape Corps, composed of the aboriginal inhabitants of Southern Africa, it does not exceed 11 per 1000; while among the Madras native troops it does not exceed 13, nor among those of Bengal is it more than 11 per 1000 annually.

Now were the climate of the West Indies as congenial to the health of the negro troops as that of their native country, it may be inferred that the mortality would not exceed that of the Indian army, which is composed of men about the same age, employed in the same description of military duty, and also in a tropical climate. In so far, then, as it exceeds that rate, it may fairly be attributed to the insalubrious influence of that climate on their constitutions.

It is by no means extraordinary that African troops should suffer as well as the whites from the climate of the West Indies, seeing that they are for the most part natives of the interior of Africa, of which the climate is probably very different; and it is well known that though the indigenous races of tropical as well as of temperate climates are peculiarly fitted by nature for inhabiting and peopling the respective portions of the globe wherein they or their forefathers were born, the effects of a transition to any other is in general productive of a great increase in the ratio of mortality.

It may not, perhaps, be premature here to mention, that the same liability to a high ratio of mortality seems to affect negro troops in almost every quarter of the globe where they have been employed. In the Mauritius they die at nearly the same rate as in the West Indies; in Ceylon, where a considerable number were employed in the colonial corps of that island, the mortality was so high that they nearly became extinct in the course of a few years, notwithstanding every care on the part of the military authorities to keep up their numbers; in Gibraltar, where the 4th West India Regiment was stationed for two or three years, 62 per 1000 of the strength died annually; and even at Sierra Leone, on the sea-coast of their own continent, the mortality has

averaged not less than 28 per 1000 annually, being about double the ordinary ratio among other troops serving in their native country. This demonstrates beyond a doubt that the constitution of the negro can be but little fitted to adapt itself to foreign climates, when even the transition from the interior to the sea-coast of Western Africa has been attended with such prejudicial effects.

The following comprehensive Table shews both the ratio of mortality among the negro soldiers employed throughout the West Indies, and the principal diseases by which it is caused:—

	Annual Ratio of Mortality per 1000 of Black Troops and Pioneers serving in each of the following Colonies.													
	British Grenn.	Trinidad.	Tobago.	Grenada.	St. Vincent's.	Barbadoes.	St. Lucia.	Dominica.	Antigua, &c.	St. Kitt's, &c.	Jamaica.	Bahama.	Honduras.	
Fevers	8.5	3.2	3.6	4.8	.9	3.8	5.2	7.7	1.7	10.5	8.2	5.6	4.4	
Eruptive Fevers.	7.7	..	..	..	1.8	..	5.4	..	..	..	..	..	..
Diseases of Lungs	17.5	16.4	12.	9.5	13.	18.7	14.8	16.7	16.8	23.9	10.3	9.7	8.1	
" Liver . . . . .	..	..	1.	..	..	9.	1.6	1.7	..	..	..	..	..
" Stomach & Bowels	5.8	5.5	4.8	4.2	11.2	12.1	7.1	7.4	3.6	6.3	3.	6.5	2.7	
Cholera Morbus. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of Brain	3.3	2.8	2.	4.2	2.8	1.9	2.4	..	1.4	1.4	..	1.9	1.4	
Dropsies	2.4	1.1	4.3	2.1	2.8	3.1	2.6	1.2	..	3.	..	2.6	1.6	
All other Diseases	2.4	2.9	1.5	2.6	3.7	5.3	4.3	4.5	2.5	2.8	4.	12.9	7.9	
Total	40.6	39.7	34.2	28.4	36.2	46.	42.7	39.9	38.9	46.3	30.	41.	30.	
Ratio of Mortality among the Male Slave Population of all ages in these Colonies .	34.	30.	47.	36.	34.	31.	35.	35.	30.	30.	..	..	..

From this Table it appears that fevers, particularly those of the remittent and intermittent type, which prove the great source of inefficiency and mortality among the white troops, exert comparatively little influence upon the blacks. Eruptive fevers, especially small-pox, are very fatal to that race, as two died out of every seven attacked. Fortunately that disease never prevailed generally throughout these Commands, but its ravages were principally confined to Trinidad, St. Lucia, and the Bahamas.

Diseases of the lungs, though not so common as among the whites, are productive of much more mortality, owing to the greater prevalence and more fatal character of inflammation of the lungs and consumption, by which nearly twice as many have died as among an equal number of white troops.

The fatal influence of this class of diseases among negro troops is not confined to this Command alone, but, as we shall afterwards shew, it extends to every climate in which they have been employed; thus inducing the supposition that there must be in the constitution of the negro some peculiarity which predisposes him to affections of the lungs. Upwards of two-fifths of all the deaths among these troops have arisen from this class of diseases, and more have died annually by it alone in this Command than among the same number of troops in the United Kingdom by all diseases together, a sufficient evidence how unsuited the climate is to their constitutions.

The negro race suffer to a much greater extent than white troops by

epidemic cholera. When this disease made its appearance at the Bahamas, though none of the white troops died from it, there were 20 of the black troops cut off out of 62 attacked, and it ran very rapidly to a fatal termination. The same has been observed whenever the native troops in the East Indies have been attacked by this disease.

By comparing the mortality of the negro troops with that of the slave population, as stated in the last Table, it will be found that in almost every case the ratio among the troops is the highest, though they are all selected men, and in the prime of life, while the slave returns, on which the preceding estimate is founded, include all classes, infants and aged, sick and healthy. This shews that the high ratio of mortality among the slave population in the West Indies, which has often been referred to as a proof of harsh treatment, rather results from their being transplanted to a climate, which, though perhaps equal in temperature, is far from being that which nature has adapted to the existence and extension of their race.

The preceding observations embrace the principal facts regarding the health of the troops at these stations. Before concluding, however, there are some other topics connected with the same subject which it may be necessary briefly to illustrate.

The mortality detailed in the preceding Tables is not the full measure of the baneful effect of the climate of the West Indies on the constitution of European troops; for it appears from the Report on which these observations are founded, that, on the average of the last 20 years, there have been discharged on account of infirm health and broken constitutions about 24 per 1000 of the strength annually from the Windward and Leeward Command, and 16 per 1000 from Jamaica. That there should be fewer from the latter Command than the former, though it is so much more unhealthy, may readily be accounted for from the circumstance of the diseases in Jamaica running so rapidly to a fatal termination, that but few of the sufferers survive to try the effect of a change of climate.

It might at first be supposed that in a country where the mortality is from 5 to 8 times as high as among troops in the United Kingdom, a corresponding proportion would be constantly on the sick list. This, however, is by no means the case, for it appears that the average of sick on the first day of every month during a period of 20 years was in the Windward and Leeward Command 87 per 1000, in Jamaica 63; while in the United Kingdom the proportion is generally from 45 to 50 per 1000. This peculiarity arises from four-fifths of the mortality in Jamaica being caused by fevers which rapidly terminate either in death or recovery, and only one-fifth from lingering diseases, such as those of the lungs and of the bowels; whereas, in the Windward and Leeward Command, scarcely half of the deaths are caused by fever, and almost all the others are by diseases which detain the patient long in hospital.

From this it will be understood how, during the ravages of epidemic fever, there may be a very great mortality, whilst the hospital may not be much more crowded than usual. Take, for instance, the numbers constantly sick of the white troops in Jamaica at two periods of the same year, one extremely healthy, the other the reverse:—

		Reported Sick in each Month.	Deaths in each Quarter.
1st April, 1827 . .		237	12
1st May, „ . .		236	
1st June, „ . .		194	
1st July, „ . .		251	
1st August, „ . .		267	253
1st September, „ . .		273	

Thus the mortality, in this instance, increased twenty-fold, without the average number in hospital being materially augmented: but the admissions during the last three months were almost entirely from attacks of severe epidemic fever, which rapidly terminating either in death or recovery, one patient soon made way for another, and a whole corps might thus have passed through the hospital in the course of a few weeks, without the proportion of ineffectives exhibiting any extraordinary increase.

The results as to the average extent of sickness to each individual, and the average duration of each attack, as compared with what takes place among the troops in the United Kingdom may be thus stated:—

		Average sick time of each Soldier per annum.	Average duration of each attack of sickness.
In Windward and Leeward	White Troops .	27 $\frac{3}{4}$ days	14 $\frac{1}{2}$ days
Command	Black Troops .	15 „	19 „
In Jamaica	White Troops .	23 „	13 $\frac{1}{2}$ „
In the United Kingdom .	„	14 $\frac{1}{2}$ „	16 „

Thus, throughout the West Indies, the average duration of each attack of sickness is considerably less than in this country; obviously in consequence of the rapid development of the febrile diseases, which are the principal source of sickness in that climate.

Several interesting questions here occur. Does this mortality affect all ages alike? Does it fall more severely on those recently arrived than on those long resident in the country? Does it affect all ranks and conditions of life equally? To these we can here only reply briefly, referring those who wish for further information to the mass of facts which will be found in the Report on that subject. As to the influence of age, the following are the results framed from observations, and extending over nearly 7000 individuals, for a period of 7 years, from 1830 to 1836 inclusive:—

	Annual ratio of Mortality per 1000 living at the following Ages.			
	18 to 25	25 to 33	33 to 40	40 to 50
Among Troops in the Windward and Leeward Command	50	74.	97.	123.
Among Troops in Jamaica Command	70	107.	131.	128.
In civil life in England, by Carlisle Tables	7	8.9	10.7	14.1

Thus instead of the mortality among our troops in the West Indies decreasing with the advance of age, as has been the general impression, it increases with infinitely greater rapidity than in this country; and the same has been found to take place at every station, whether temperate or tropical, to which similar investigations have extended.

That the mortality in Jamaica is, in a small degree, lower between the age of 40 and 50 than between 30 and 40, does not arise from any improvement in constitution, but from the large proportion of men of that class who are invalided and sent home, which has often prevented them from being exposed to the climate during the whole of the year for which the calculation has been made.

The results of a recent investigation by the Secretary of the Bengal Government into the casualties at different ages among the civil and military servants in that Presidency strikingly confirm these deductions as to the progressive increase of mortality with the advance of age in tropical climates.

For instance, out of 1184 deaths among officers in that Presidency, the proportion occurring annually in each rank, and at each age, has been as under :—

Died Annually per 1000 of each Rank :—

Colonels, average Age 61.	Lieut.- Colonels, average Age 51.	Majors, average Age 40.	Captains, average Age 36.	Lieutenants, average Age 18 to 33.	Cornets and Ensigns, average Age 18 to 33.	General Average at all Ages.
59·4	48·4	41·0	34·5	27·5	23·4	31·2

The mortality among the civil servants there, for a period of 46 years, from 1790 to 1836, exhibits almost precisely the same results, viz.—

Died Annually per 1000 of each Class :—

Above 50 Years of Age, and 30 of Service.	Age 45 to 50; Service 25 to 30.	Age 40 to 45; Service 20 to 25.	Age 35 to 40; Service 15 to 20.	Age 30 to 35; Service 10 to 15.	Age 25 to 30; Service 5 to 10.	Age 20 to 25; Service 1 to 5.
48·6	36·4	33·4	23·4	16·6	20·8	19·9

Between 10 and 15 years' service is the period when leave of absence is allowed to those who choose to return to Europe for 3 years, which of course must have a material tendency in reducing the mortality of that class. With this exception the results are uniform for both civil and military servants, and they are no less so when extended to the officers of the other Presidencies.

The reason of the erroneous impression which has hitherto prevailed in regard to persons at an early period of life being most subject to mortality in tropical climates, has principally arisen from the want of that basis of all statistical enquiries on such subjects—an accurate knowledge of the number living at each age, as well as of those who died at that age; when these can be obtained on an extended scale, mortality is found to follow the same law in tropical climates as in any other, except that it proceeds at a much more rapid pace.

These results serve in some measure to solve the question, whether mortality falls more severely on persons who have recently arrived in the West Indies than on those who have been longer resident; for at least three-fourths of the numbers between 18 and 25 years of age were men recently arrived from the depôts, consequently, if they suffered more than the others, it would be impossible for the mortality at that age to be lower than among the more advanced classes, which are composed for the most part of men several years resident in the country.

In the Report no pains have been spared to determine this point, on which many military arrangements of the first importance, connected with the relief of corps, obviously depend. In the space to which these remarks must be confined, it is impossible to enter minutely into all the modes of proof adopted; but the following is extracted, as being probably the most conclusive, since it exhibits an exact comparison between the number of deaths in Jamaica out of each draft which arrived there during a period of 7 years, and those which occurred among the rest of the troops who had been for some years stationed there.

Regiment.	Date of Arrival of the Draft in Jamaica.	Number who joined the Service Companies.	Died within one year after joining	Remained alive at commencement of second year.	Died in second year of residence.	REMARKS.
33rd Foot	November, 1830	12	2	{ Left Jamaica before second year was completed.
22nd "	January, 1830	52	5	47	9	
	April and May, 1833	190	10	180	24	
	March, 1834	43	2	41	3	
	January, 1835	9	1	8	..	{ Second year's returns not yet received.
	December, 1835	83	2	..	..
84th "	January, 1830	71	7	64	11	
	April and May, 1833	145	13	132	7	
	March, 1834	43	..	43	2	Ditto.
	November, 1834	41	..	41	2	
	January, 1836	23	2	..	..
37th "	May, 1833	39	2	37	..	
	April, 1834	54	3	51	1	Ditto.
	November, 1834	37	1	36	6	
	January, 1836	56	9	..	..
56th "	April and May, 1833	66	5	61	3	
	May, 1834	20	..	20	..	Ditto.
	December, 1834	47	2	45	2	
	January, 1836	69	5	..	..
64th "	January, 1836	57	3	..	..
8th "	April, 1834	18	3	15	4	Ditto.
	January, 1835	63	12	51	2	
	January, 1836	92	5	..	..
77th "	April and May, 1833	150	20	..	..
	Total . . .	1480	114	872	76	{ Left Jamaica before second year was completed.

In the course of 7 years, therefore, the numbers and deaths of those least acclimatized, compared with those who had been longer in the island, were respectively as follows:—

	The Total Strength was	The Total Deaths	Annual Ratio per 1000 of Strength.
Of those under 1 year's residence . . .	1,480	114	77
Of those above 1, but under 2 ditto . .	872	76	87
Total under 2 years' residence	2,352	190	81
The total strength and deaths of all classes in the Service Companies of these Corps was, during the same period }	16,653	1520	91
The difference shews the strength and deaths of those who were longer than 2 years resident in the island to have been }	14,301	1330	93

Thus, while the annual mortality among those resident 1 year only was 77, and of those 2 years resident 87 per 1000, the mortality among those who had been longer in the island averaged 93 per 1000. We have restricted our observations to the first 2 years of residence, because it is during that period the influence of the climate is supposed most to affect those recently arrived; and it would have been an excessively tedious operation to have carried on the investigation with similar accuracy for the subsequent years.

To determine the supposed effect of acclimatization with as much accuracy as the subject will admit, all the returns received from each corps for a period of 20 years have been investigated, and the results tend to similar conclusions. It is, perhaps, unnecessary to enter into the details of the mortality in each corps during so long a period; we shall therefore merely subjoin, in the words of the Report, the deductions which have been arrived at on combining all the information attainable on this subject.

1. That troops are likely to gain but little immunity from either disease or mortality by a prolonged residence in the West Indies. This is established by several instances of corps which have suffered to as great an extent during the latter years of their residence as during the earlier, particularly the 1st, 5th, 9th, 25th, 35th, 67th, 69th, 86th, and 93d, in the Windward and Leeward Command, as well as the 33d, 56th, 61st, and 91st, in the Jamaica Command.

2. That soldiers are not in general liable to any greater mortality during their first year of service there than at any subsequent period. This is shewn, not only by the instances before referred to, but also by the experience of 12 corps out of 21 in the Windward and Leeward Command, and that of the 56th, 58th, 61st, and 64th regiments in Jamaica, in all of which the mortality during the first year of residence was under the general average of the island.

3. That when the circumstances attending the mortality in several of the corps during their first year of residence in Jamaica are minutely investigated, the facts apparently at variance with the above conclusions are sufficiently explained by the occurrence of four epidemics between

1819 and 1827, so that no corps could arrive without encountering their fatal effects within the first year or two of its residence there.

4. That though, in years of ordinary mortality, corps long resident in the island suffer as much or even more than those recently arrived, yet during the ravages of epidemics there appears a partial exemption in favour of the former.

This peculiarity may however be easily accounted for without attributing it to so indefinite a cause, or one so little supported by numerical results as the supposed influence of acclimatization. All the medical reports concur in stating how much the susceptibility to fever is increased by fear and despondency, and these passions we may easily conceive operate much more powerfully upon the minds of men newly arrived in the country than upon those who have perhaps encountered and survived similar epidemics before. We may easily fancy what must be the feelings of a recruit, when he sees a fourth part of his comrades swept off in the space of a month, as was the case in some corps soon after their arrival. We can suppose the apprehension with which he will contemplate the probability of a similar fate, and how little expectation he will entertain of being among the fortunate survivors. He is thus not only rendered more susceptible of the influence of disease, but goes into hospital scarcely with a hope of recovery; whereas the soldier who has been longer accustomed to the mortality of that country possesses not merely the advantage of being less apprehensive, and consequently less susceptible, but even if seized with fever will keep up his spirits, and contend against the violence of an attack under which the other would sink.

We may mention as a remarkable instance of the influence of fear in inducing this disease, as well as of hope in repelling it, that during the epidemic in 1822, among the 91st regiment, at Up-Park Camp, when the order was issued for their removal to another station, the fever ceased, and *though the corps was unexpectedly detained for three or four days after the order was issued, not one case was admitted into hospital in the whole course of that period.*

The origin of the prevailing idea in regard to the advantages of acclimatization, which is so opposed to numerical results, may very probably be traced to the fact that persons long accustomed to the mortality of any station which is particularly insalubrious, seem to become in a great measure unconscious of its extent as compared with what takes place in a healthier climate. We consequently find in Jamaica that if the deaths are a little under 13 per cent., those corps which have been long resident in the island, and accustomed to a higher ratio of mortality, congratulate themselves on having enjoyed what they deem a healthy season. With corps newly arrived from Europe, however, this is not the case; they have been accustomed to a mortality of about $1\frac{1}{2}$ per cent., and when they find it increased tenfold, a stronger impression of the deadly nature of the climate is produced than perhaps double the mortality would occasion in any subsequent year. The soldier, by remaining in the climate, if he become not more seasoned to it, is certainly more unconscious of its fatal effects, and views it with less apprehension, precisely as the veteran regards with coolness and apathy the dangers of the battle field, which create a vivid and perhaps lasting impression on the mind of the recruit.

The official results in regard to the mortality at each age among the military officers and civil servants of the Bengal Presidency, before quoted, afford a convincing proof that in the East Indies also no advantage has hitherto been derived from length of residence. As these individuals are never employed out of India, and generally arrive there about the age of 18 or 20, their respective ages and ranks may be assumed as a criterion for estimating their length of residence in that country. On that principle, then, we find, taking equal numbers of each rank, that the mortality among the ensigns, for the most part youths but recently arrived, is only 23; while that of the lieutenants, who must have been at least three years longer resident to have attained that rank, is 27; and that of the captains, who must have been about 12 or 13 years longer, is 34 per thousand, and so on in a corresponding proportion with the higher grades.

In case it should be objected that this does not exhibit the precise operation of mortality during the first year or two of residence in that country, when the influence of acclimatization is supposed to be most strongly manifested, the following information in regard to the civil servants in the Bengal Presidency will supply that defect:—

	Numbers Alive.	Deaths in First Year.	Ratio of Deaths per 1000 of Living.
1st year of residence . .	975	19	19.5
2nd ditto	933	22	23.5
3rd ditto	906	18	20.
4th ditto	874	19	22.

These observations as to the influence of acclimatization refer to the mortality only. No conclusions can be drawn as to whether the extent of sickness is, or is not, greater among troops newly arrived, than among those who have been long resident, from the want of proper evidence on that subject. It militates, however, very strongly against the former supposition, that in 1831, when no corps or recruits arrived in Jamaica, the admissions from fever alone were 2276, whereas the strength was only 2232. Consequently, on the average, each of these men, *though acclimatized*, must have been treated for fever at least once in the course of the year, which is greatly above the usual ratio even when a large proportion of recruits have joined; and if we take the previous year, 1830, when no corps and only 241 recruits arrived, we find the cases of fever alone to have been 2462 out of a strength of 2842; consequently, on the average, each man must have had an attack once in 13 months. Little benefit then can be expected from length of residence if the susceptibility to fever remains undiminished, as in these instances is clearly proved to have been the case?

It is unnecessary to extend the same train of reasoning to diseases of the bowels, lungs, and liver, which form so considerable a portion of the admissions; because so far are these from ever being benefited by acclimatization, that change of residence is generally recommended as a probable means of inducing recovery.

The next subject of enquiry is, whether the mortality and diseases

from which the troops suffer to such an extent in the West Indies affect all ranks equally. We have already shewn this to be the case in most instances of epidemic, but in years of ordinary salubrity, the officers seem to enjoy a considerable exemption, for while the annual mortality of the troops generally was $78\frac{1}{2}$ per 1000 from ascertained diseases, in the Windward and Leeward Command, that of the officers was but 42; and in Jamaica, where the troops lost 121 per 1000 annually by ascertained diseases, the mortality of the officers amounted only to $83\frac{1}{2}$ per 1000. There is a still greater difference in favour of the officers in the extent of sickness; but then it must be kept in mind that, however slight the disease of a soldier may be, he must be admitted into hospital that it may come under treatment, and every case is consequently recorded; whereas among the officers many of the slight attacks which may be remedied by the use of medicine without regular professional attendance are not taken notice of in the Returns.

Keeping these considerations in view, the following Table will exhibit the relative influence of the principal classes of diseases on officers and privates.

	WINDWARD AND LEEWARD COMMAND.			
	Annual Ratio of Admissions per 1000 of Mean Strength.		Annual Ratio of Deaths per 1000 of Mean Strength.	
	Officers only.	Troops generally.	Officers only.	Troops generally.
By Fevers	358	717	29.	36.9
Eruptive Fevers . . . . .	..	$7\frac{1}{16}$	..	..
Diseases of the Lungs	53	115 $\frac{1}{16}$	3.2	10.4
" " Liver	41	22	3.5	1.8
" " Stomach & Bowels	148	421	2.4	20.7
" " Brain	9	28	2.9	3.7
Dropsies	2	$7\frac{1}{16}$	..	2.1
All other Diseases	234	592	1.	2.9
Total	845	1,903	42.	78.5

	JAMAICA COMMAND.			
	Annual Ratio of Admissions per 1000 of Mean Strength.		Annual Ratio of Deaths per 1000 of Mean Strength.	
	Officers only.	Troops generally.	Officers only.	Troops generally.
By Fevers	386	910	69.2	101.9
Eruptive Fevers	1	$7\frac{1}{16}$	..	..
Diseases of the Lungs	35 $\frac{1}{2}$	84 $\frac{1}{16}$	2.	7.5
" " Liver	18	10	1.	1.
" " Stomach & Bowels	77	238	3.6	5.1
" " Brain	5	14	3.6	2.6
Dropsies	3 $\frac{1}{2}$	5	2.5	1.2
All other Diseases	111	550	1.5	2.
Total	637	1,812	83.4	121.3

The only diseases by which officers suffer more than privates are those of the liver. This is a very general feature throughout all foreign stations, and may perhaps be accounted for by the circumstance that in the course of an officer's military service he may have been 3 or 4 times in tropical climates with different regiments, and thereby have acquired a greater predisposition to these diseases than the soldier, who, from not changing his corps, rarely serves more than once in such climates. Besides, diseases of this class, as well as those of the brain, are generally most frequent among persons in the higher ranks of life.

The mortality by fever is less among the officers than among the privates in the proportion of 2 to 3, but it is principally from the milder forms of fever that they are exempt. When attacked by remittent or yellow fever, a larger proportion of the cases prove fatal than among the privates.

In regard to the probable causes of the comparative exemption of officers from diseases of the bowels and of the lungs, so strikingly shewn in the preceding Table, we subjoin the following extracts from the Report.

If one class of men is found to suffer more from diseases of the bowels than another, when there appears nothing in their duty or employment to create such a difference, we are naturally led to enquire into the nature of their diet; and on ascertaining from the results of 20 years, that in the one Command, where, for 5 days in the week, it has consisted of salt provisions, the mortality by that class of diseases has been 9 times as high as among the officers, while in the other, where but 2 days' salt provisions have been issued in the week, the mortality of these two ranks approximates so nearly as to be almost on a par, we are led to the conclusion that this cause is likely to have had some influence on the prevalence and fatal character of these diseases in the Windward and Leeward Command.

If it be maintained that the soldier's liability, as compared with that of the officer, arises from his own intemperance or exposure to night-duty, then it may be asked why should not a similar effect be produced in Jamaica, where there is the same intemperance, and the same extent of night-duty to induce it; the cause seems inexplicable, except by referring to the agency of diet, for the results are too uniform, and extended over too long a series of years, to admit of this difference being attributable merely to chance.

The comparative exemption which officers enjoy from diseases of the lungs, both in the Windward and Leeward Command, and in Jamaica, is another very marked result in the preceding table. It will be seen that the mortality by these among the officers amounts at the former station to only about one-fourth, and at the latter to only one-fifth of what occurs among the troops generally—a remarkable circumstance, when we consider how carefully recruits are selected at their enlistment; whereas officers undergo no personal examination, and many of them may therefore be supposed to enter the army with a predisposition to affections of the lungs, which unless counteracted by powerful advantages in their favour, would probably subject them to a higher ratio of mortality by these diseases than the selected portion of the troops.

Of this class of diseases, consumption is the principal source of mortality among the troops. Now if the liability to that disease arose

entirely from the climate of the West Indies, we should expect to see it equally manifested among the officers, whereas though 614 of the troops died in the Windward and Leeward Command, and 327 in Jamaica, of consumption and hemoptysis, which may probably be held as a modification of the same disease, there died of officers but 9 in the former Command, and 3 in the latter, from the same causes. If this remarkable difference is accounted for by supposing that officers may leave the island for change of climate, and their deaths not be reported, then we refer to the relative proportion of officers and men treated, and we find it to be in the Windward and Leeward Command as 6 to 15, and in the Jamaica Command as 4 to 15. Hence we are led to infer, that the great susceptibility of our troops to this disease in the West Indies is not attributable to climate only, but also to some peculiarity in their condition from which officers are exempt.

As to what that peculiarity may be, we do not feel warranted in hazarding any positive assertion; but Sir James Clarke, one of the ablest authorities on pulmonary diseases, states, in a recent treatise on that subject, that improper diet and impure air are the most certain exciting causes of consumption among those not hereditarily predisposed to it, and has even demonstrated, by experiment, that tubercular affections may be induced in animals by confinement in close humid places and innutritious food; consequently, it seems not improbable that crowded barrack-rooms and a restriction to salt diet may, particularly in a tropical climate, produce a similar effect on the constitution of soldiers.

Some, however, may be inclined to attribute the extent of mortality by this disease more to the soldiers' exposure on night-duty than to the influence of diet or accommodation; and though to this supposition we do not mean to offer any positive contradiction, still it is at variance with the fact, that exposure to an equal extent in the cold regions of North America produces little more than half the mortality by pectoral affections which occurs in the warm climate of the West Indies, and that in the East Indies, where the soldier has also the same degree of night exposure, *with a similar temperature*, the mortality by this class of diseases is little more than a fourth of what occurs in the west. The cause cannot well be referred to intemperance, since that prevails to about an equal extent in each of these military Commands.

One of the most convincing proofs on this head, however, is, that the serjeants and corporals, who, from not having to perform the duty of sentinels, are not so much exposed to the night air, and who, from their situation, must be less prone to intemperance, are as subject to mortality as the privates. On comparing the average ratio among these ranks for a period of 5 years, from 1830 to 1834 inclusive, it was ascertained that in the Windward and Leeward Command the mortality of the serjeants was 73, and of the corporals 64, while that of the general mass of the troops was only 57 per 1000; and that in the Jamaica Command the deaths among the serjeants were 108, and among the corporals 95, while the mortality among the troops generally was 109 per 1000. The only persons, except the officers, who seem to have enjoyed any material exemption, are the drummers—a class of men proverbially prone to intemperance, but being for the most part younger than the general mass of the troops, that circumstance has tended to reduce the mortality under

the general average, and to confirm the results formerly obtained in regard to the influence of age in this respect.

Before concluding these remarks, it is necessary to refer to another question which naturally arises from the consideration of these details. Are the troops equally affected by the climate at all seasons? for, were it otherwise, we might hope, by investigating carefully the atmospherical and meteorological phenomena most common at the unhealthy season, to find some solution of the mystery in which the cause of so much sickness and mortality is at present involved. But the following Table, which has been compiled to exhibit the number of admissions and deaths in each month for a long series of years, affords little support for any general theory on that subject.

General Abstract of the Total Admissions and Deaths by all Diseases among the Troops in the following West India Colonies, during the undermentioned periods.

	British Guiana.		Grenada.		St. Vincent's.		Barbadoes.		St. Lucia.	
	For 19 Years.		For 18 Years.		For 19 Years.		For 19 Years.		For 19 Years.	
	Total Admitted.	Total Died.	Total Admitted.	Total Died.	Total Admitted.	Total Died.	Total Admitted.	Total Died.	Total Admitted.	Total Died.
January.	2899	97	785	25	819	32	3366	124	1202	75
February.	2936	86	780	22	893	24	3385	115	1209	77
March.	2743	81	773	22	877	41	3410	116	1168	61
April.	2601	73	819	14	908	31	3895	91	1245	66
May.	2758	59	817	20	1020	29	4389	141	1402	91
June.	3174	103	789	23	1027	38	4202	139	1295	66
July.	4248	180	780	19	971	29	4177	133	1382	62
August.	4720	177	769	27	807	33	4041	131	1337	59
September.	4536	155	880	52	716	37	3599	132	1259	55
October.	4006	113	718	37	673	25	3492	160	1078	68
November.	3387	76	747	32	661	23	3298	178	1185	56
December.	3086	67	729	20	677	16	3127	129	1174	84

	Dominica.		Antigua and Montserrat.		St. Kitt's, Nevis, and Tortola.		Jamaica.		Bahamas.	
	For 19 Years.		For 19 Years.		For 19 Years.		For 18 Years.		For 12 Years.	
	Total Admitted.	Total Died.	Total Admitted.	Total Died.	Total Admitted.	Total Died.	Total Admitted.	Total Died.	Total Admitted.	Total Died.
January.	644	38	1009	56	861	52	7465	559	458	8
February.	533	28	1009	46	709	22	6725	351	377	14
March.	624	41	925	36	646	26	6560	291	467	15
April.	682	34	944	36	765	20	6560	262	482	15
May.	606	22	941	26	868	30	7039	286	570	15
June.	809	29	954	23	844	42	7303	323	476	10
July.	926	39	999	26	796	30	7667	427	527	15
August.	773	69	945	26	809	28	7769	786	568	35
September.	782	51	958	30	818	30	7354	515	747	38
October.	733	75	985	40	799	55	7730	640	765	33
November.	716	91	941	46	809	56	7709	801	659	24
December.	598	45	845	35	764	44	7260	725	544	18

From this Table it appears that though in British Guiana, Jamaica, and the Bahamas, the period from June to November or December is

generally the most unhealthy and most fatal to the troops, that can by no means be regarded as a general rule; for in other colonies, such as Dominica and St. Lucia, every period of the year seems alike unhealthy; and in some of the islands, such as Antigua and St. Vincent's, that period is the most healthy which in others is the reverse.

Our readers will now be prepared to enter on a few general deductions drawn from this mass of statistical facts, and which we subjoin in the words of the Report:—

“It has been supposed by many that the diseases which prove so fatal to Europeans in these latitudes, especially fevers, are, if not a necessary, at least a very general consequence of continued exposure to a high temperature. The sufficiency of this, however, as a uniform cause of sickness and mortality, is contradicted by the fact, that these vary considerably in different stations, the mean temperature of which is nearly alike. The range of the thermometer, for instance, in Antigua and Barbadoes, is rather higher than in Dominica, Tobago, Jamaica, or the Bahamas; yet we find that the troops in the latter stations suffer nearly three times as much as those in the former. The preceding pages also afford several instances in which epidemic fever made its appearance, and raged with the utmost virulence during the winter months—a circumstance not likely to have taken place if that disease had originated in increased temperature. We may also state that the epidemic fevers which prevailed at Grenada in 1793, and at St. Christopher's in 1812, two of the most fatal which ever appeared in the West Indies, commenced, the former in March, and the latter in February, and continued with unabated violence during the whole of the cold season.

“If elevated temperature were an essential cause of the mortality to which Europeans are liable in this climate, we might expect it every year to produce similar effects; whereas, on the contrary, it appears, from the tabular statements in the preceding Report, that the mortality in one year is sometimes 20 times as high as in another, without any perceptible difference in the range of temperature.

“If, as is supposed by some persons, the mortality of the troops depended materially on the influence of moisture, we might expect it to attain its maximum in those stations where the fall of rain was the greatest, whereas the average mortality of the troops in Jamaica is at least double that which prevails among those in British Guiana, though the quantity of rain which falls in that island is little more than half as great; and we have adduced many instances in which epidemic fever has broken out, and raged with great violence, at a period when no rain had fallen for several months; nay, in some stations a dry, in others a wet season, is considered the most unhealthy—an anomaly not likely to occur if excess of moisture were uniformly an essential cause of insalubrity.

“It must also be remembered that this excess of moisture is not confined to the West Indies, but is a general characteristic of all tropical regions: and were it so productive of disease in the Western hemisphere, the same effect might be expected to ensue from it in the East; whereas, on the contrary, the Malabar Coast, which is deluged by rain for six months in the year, is generally one of the most healthy quarters in the Madras Presidency.

"That neither heat nor moisture can be the primary causes which influence the health of troops in the West Indies is at once established. The comparative view of the ratio of mortality in each year at every station, in which there are numerous instances of two adjacent islands, or even of two contiguous stations in the same island, being subject in an equal degree to the operation of these agencies, and yet while the one has been desolated by the ravages of fever, the other has been enjoying a degree of salubrity equal to that of Great Britain.

"Though heat and moisture are not the primary causes of fever, however, it is highly probable their operation tends, in some measure, to increase its intensity. The tables shew that the greatest number of admissions into hospital and deaths has, on the average of a series of years (though not uniformly or equally in each year), taken place in those months when the greatest degree of heat was combined with the greatest moisture; and it may be observed as a striking exemplification of this fact, that as the sun proceeds northward in the ecliptic, carrying heat and moisture in his train, the period generally termed the unhealthy season is later in the northern colonies than in those to the south.

"The unhealthy character of that period of the year in which the greatest degree of heat and moisture is combined is not, however, confined to the West Indies, but extends also to the East, as well as over a large portion of the Northern temperate zone. In the Mediterranean stations particularly, the admissions into hospital and deaths among the troops average nearly twice as high between July and October as during any other months of the year. Even in Canada, the same peculiarity is observable, though not in so marked a degree; and conversely in stations southward of the equator, that period of the year, which on the north of the line is the most unhealthy, becomes in the south the most salubrious, in consequence of the seasons being reversed.

"A knowledge of this fact at once overturns a plausible hypothesis which attributes the unhealthy character of the West Indies, during what is termed the sickly season, viz., from July to October, to the want of the free ventilation afforded by the trade-winds during the rest of the year, but which at this period either cease altogether, or become very irregular. But though these two events, the failure of the trade-winds and the increase of sickness and mortality, take place at corresponding periods, the latter can never be regarded as a necessary consequence of the former, when we find that in other quarters of the globe, beyond the range of the trade-winds, that is, in countries north of the 30th and 32d degree N. Lat., and in which ventilation is quite as perfect at that period as at any other, the unhealthy nature of these months is marked as strongly as in the West Indies.

"This same fact strikes also at the root of another hypothesis, which attributes the sickly season in these regions to some morbid principle generated in the vast forests and savannahs of the South American continent, and wafted to these islands by the south-westerly winds which generally prevail during that period. Besides, were this hypothesis correct, we might expect that British Guiana would, from its proximity to this cause of disease, be most subject to its operation, and consequently the most unhealthy; and that the colonies further to the north, being least exposed to it, would enjoy the greatest degree of

salubrity. The result of our investigations into the comparative mortality in each colony shews, however, that their relative salubrity is by no means affected by their proximity to or distance from that continent.

"To illustrate the influence of local circumstances, in particular, of exhalations or emanations from the soil, we have stated, as accurately as our information will admit, the physical and geological characters of the soil in each island, and in the immediate vicinity of each station; and by comparing these with the mortality there, have ascertained that at many where the soil appears exactly the same the rate of mortality is very different, and at others, where the soil is very different, the rate of mortality is much the same. It is also to be observed that, while the soil and its physical characters are the same in every year, the sickness and mortality are extremely variable, and only in certain seasons and years attain an extraordinary degree of intensity. It frequently happens, too, that a station which has been remarkable for its sickly character for one or two seasons, becomes, without any perceptible reason, just as remarkable for its salubrity, which could scarcely happen if the cause of that sickness and mortality existed in the soil, which was constantly there to produce it.

"The agency, real or supposed, of marshes is liable to a similar objection. That the vicinity of marshes, swamps, and lagoons, is generally subject to fevers, both of the intermittent and the remittent type, is a fact sufficiently established by multiplied experience, both in tropical countries and within the temperate zones. But that remittent or yellow fever may be generated where no such cause is in operation to produce it, and that consequently it is impossible to establish a necessary connexion between this cause and the appearance of that disease, is sufficiently established by the fact that the sickness and mortality in British Guiana and Honduras, where swamps and marshes most abound, are considerably less than at Up-Park Camp, and several of the other stations in Jamaica, remote from the operation of any such agencies.

"The same remark may be applied to excessive or rank vegetation, to the influence of which much of the sickness and mortality at some of the stations has been ascribed. To both of these causes, indeed, the remark already made regarding the influence of the soil, is strictly applicable. The marshy lands and the rank vegetation exist at many of the stations in every year, whereas the disease, which is represented to proceed from them, is only of occasional occurrence, and the foregoing Report shews that in some years the extent of mortality has been ten times as great as at others, when the degree of heat and moisture by which the marshy soils and vegetation are most likely to have been affected have been much the same.

"The object of this Report is rather to point out effects than to speculate upon causes, especially where they are so much involved in doubt and obscurity. We have merely referred to these alleged sources of disease to shew how much they are at variance with numerical results, and because so long as the causes which affect the health of troops in the West Indies are held to be accounted for by theories founded on error, it is not to be expected that others will be started more consistent with truth."

NOTE BY THE EDITOR.

The value of these statistical investigations to medical science are almost too obvious to require any comment. Their extension over the whole of the foreign possessions of the Crown, which we understand to be the intention of Government, will supply the best information regarding the geographical distribution of diseases and the influence of particular climates in aggravating or ameliorating them, and may, perhaps, by analogical deductions, lead to a knowledge of the causes which render some of the fairest portions of the globe so inimical to European life.

The result of such investigations, extended over the whole globe, will open a new passage in the natural history of man; for, as the colonial corps employed in our foreign possessions are composed of various races, Maltese, Negroes, Hottentots, Cingalese, Malays, and Hindoos, the Returns of the medical officers by whom they are attended, when arranged upon the same principle, and the results condensed as in this Report, will exhibit at one view the diseases to which each of these races are most subject, and the effect of these diseases, as compared with their influence on the constitution of Europeans serving in the same climate. Nor will these statistical details be useful to science alone; but they have already been the means of drawing the attention of Government to the condition of the troops serving in the West Indies, and under the humane and intelligent directions of the Secretary-at-War, have led to many important ameliorations in their condition. The period of service there has been reduced from 10 to 3 years. Fresh provisions have been substituted for salt; improved barrack and hospital accommodation, and healthier localities have been provided for the white troops; and in those islands which proved so exceedingly unhealthy to them garrisons of black troops have been substituted. It is thus that statistical investigations may be rendered available to the best of all purposes, that of improving the condition, increasing the health, and diminishing the sufferings and mortality of our countrymen.

To the Editor of the Journal of the Statistical Society of London.

SIR,—I beg to call your attention to a statement made at p. 315 of the last number of your Journal, respecting the increase of machinery employed in the cotton trade, which appears to me calculated to produce an erroneous and somewhat mischievous impression.

You stated that the steam-power employed in the cotton manufacture in Lancashire and Cheshire has increased, since July, 1835, from 24,597 horses to 39,974, or 62 per cent., or (leaving out the engines merely *in process* of erection) that the increase has been from 24,597 to 35,787 horses, or above 45 per cent.

Now there are only three ways in which this alleged increase can have taken place. 1st, by an increased consumption of the raw material; 2nd, by spinning and manufacturing finer fabrics, which require more machinery for the same weight of cotton; or, 3rd, by adding power-looms to the previously existing spinning-mills, which would thus weave their yarn instead of selling it.

1. Now the consumption of the raw material has only increased from 18,167 bags weekly, in 1835, to 20,785, in 1837, or 14½ per cent.

2. It is pretty well known, I believe, in the trade, that for the last year and a half, or more, the tendency has been rather to increase the *coarser* and diminish the *finer* fabrics, and therefore to employ relatively less machinery than before.

3. The only remaining way of accounting for the alleged increase, therefore, is to assume that the additional steam-power has been employed for working power-loom—and undoubtedly this has been the case to a considerable extent. But (since we have no reason whatever to believe that hand-loom have been diminished) if the increase of power has been 45 per cent., and the increase of cotton consumed only $14\frac{1}{2}$ per cent., the export of yarn must, in this case, have fallen off $30\frac{1}{2}$ per cent. The contrary, however, is the fact. The export of yarn was, in 1835, 82 millions of pounds, and in 1837 (an extraordinary year) 105 millions, being an increase of 28 per cent.

It would appear, therefore, either that the steam-power actually at work in 1835 was greatly under-estimated by the factory inspectors, or that the returns just published by the Poor Law Commissioners are greatly exaggerated: both of which conclusions I am inclined to adopt. Certain it is that the same machinery is made to work up a larger quantity of cotton now than formerly. It is equally certain that the raw material manufactured has only increased $14\frac{1}{2}$ per cent. in the last two years; I do not therefore see how the alleged increase can have taken place.

I am, Sir, &c.,

The Dales, September, 1838.

W. R. GREG.

MISCELLANEOUS.

Religious Instruction in Jamaica.—There are 21 parishes in the island, in each of which there is a parish church in connexion with the Establishment. There are, besides, 32 chapels of ease in the island, and a few licensed places of worship. The number of ordained clergy is 61, and of catechists 7.

There are in connexion with the		Chapels.	Stations.	Clergy.	Missionaries.
	Kirk of Scotland	2	..	2	..
	Presbyterian Church . . .	1	..	..	1
	Roman Catholic Church . .	4	..	4	..
	Jewish Church	3	..	3	..
	Wesleyan Missionary Society	26	Numerous.	..	23
	Wesleyan Secession	3	1	3	1
	Baptist Missionary Society .	25	Numerous.	..	20
	Baptist Secession	12	2	13	..
	Church Missionary Society .	3	1	..	5
	London " "	8	1	..	6
	Scotch " "	7	Numerous.	..	9
	Moravian " "	9	Numerous.	..	11
	Total	103	..	25	76
	Established Church	53	..	61	7
	Total	156	Numerous.	86	83

Commons' Paper, 1837-8, No. 113.

A further List of Statistical Papers printed by the Houses of Parliament during the Session of 1837-8.—(Continued from page 319.)

No.

HOUSE OF LORDS.

- 327 Ecclesiastical Revenue and Patronage, Ireland—Fourth Report of Commissioners
 357 Southwark Court of Requests—Plaints entered, 1835-37
 358 Hayti and Jamaica—Exports from Great Britain, &c., 1828-37
 363 Criminal Law—Report of Select Committee on Summary Convictions
 364 Retail Spirit Licenses, Ireland—Number granted in 1830

HOUSE OF COMMONS.

- 589 Education of Poorer Classes—Report of Select Committee
 648 Manor Courts, Ireland—Report of Select Committee
 659 Passing-Tolls on Vessels—Amount Levied at each Port, 1807-37
 669 Transportation—Report of Select Committee
 677 Pawnbroking in Ireland—Report of Select Committee
 680 State of New Zealand—Report of Select Committee of House of Lords
 685 Western and Southern Australia—Expenses, Trade, Population, &c.
 686 Municipal Corporations—Reports of Commissioner Hogg
 687 Western Australia—Statistical Report on State and Prospects
 692 Church Leases—Report of Select Committee
 694 Poor-Law Act—Diet of Independent Labourers and Paupers, Marriages and Illegitimate Births, in certain Parishes
 701 Education, Ireland—Report of Select Committee
 707 Copyholds' Enfranchisement—Report of Select Committee
 709 Trinity House, Deptford Strond—Revenue and Expenditure, 1836; Purchase of Private Light-houses
 715 Education, Scotland—Report of Select Committee
 717 Spirit Licenses, Ireland—Number in Force in each Town and County
 722 Public Bills—Become Acts or rejected, Sessions 1837-8
 724 Colonial Shipping—Number and Tonnage built in each British Colony, 1814-37
 726 Public Works in India—Annual Reports of Military Board, Calcutta, 1834-35
 729 Patents for Inventions—Table of Fees, and other Expenses
 730 Ministers' Money, Ireland—Date of Commissions, Amount Levied, 1831-37
 732 Half-Pay (Civil and Military)—Amount in each Department, 1834-37
 734 Ballast Board, Dublin—Revenue and Expenditure, 1835-37

PRESENTED BY COMMAND OF HER MAJESTY.

Poor-Law Commission—Fourth Annual Report, 1838

Railways, Ireland—Second Report of Commissioners

Weekly and Quarterly Average Prices of Corn in England and Wales in the Month of September, and Quarter ended Michaelmas, 1838.

	Weeks ended September						Quarter ending Michaelmas.					
	7th		14th		21st			28th		Average of the Month.		
	s.	d.	s.	d.	s.	d.		s.	d.			
Wheat	70	2	64	2	61	10	62	11	64	9	68	11
Barley	34	2	32	7	32	2	31	11	32	8	32	10
Oats	24	1	22	8	22	9	22	7	23	0	23	2
Rye	36	11	36	11	36	4	34	4	36	1	36	10
Beans	41	2	40	1	39	7	39	9	40	1	39	4
Peas	37	0	38	3	39	2	40	3	38	8	37	3

REVENUE.

An Abstract of the Net Produce of the Revenue of Great Britain in each of the Years and Quarters ended 10th October, 1837 and 1838.

	Years ended 10th October,			
	1837	1838	Increase.	Decrease.
	£.	£.	£.	£.
Customs	18,372,944	18,823,619	450,675	..
Excise	12,007,238	11,827,788	..	179,450
Stamps	6,461,282	6,636,204	174,922	..
Taxes	3,693,380	3,647,157	..	46,223
Post-Office	1,490,743	1,536,000	45,257	..
Crown Lands . . . . .	..	130,000	130,000	..
Miscellaneous	44,635	44,781	146	..
Imprest Monies, Repay- ments, &c.	817,416	983,134	165,718	..
Total Income .	42,887,638	43,628,683	966,718	225,673

	Quarters ended 10th October,			
	1837	1838	Increase.	Decrease.
	£.	£.	£.	£.
Customs	5,436,116	5,469,271	33,155	..
Excise	3,705,467	4,093,959	388,492	..
Stamps	1,622,252	1,751,476	129,224	..
Taxes	308,092	328,045	19,953	..
Post-Office	418,006	410,000	..	8,006
Crown Lands . . . . .	..	65,000	65,000	..
Miscellaneous	2,701	8,376	5,675	..
Imprest Monies, Repay- ments, &c.	200,531	222,948	22,417	..
Total Income .	11,693,165	12,349,075	663,916	8,006

Total increase on the year 741,045 $\frac{1}{2}$; total increase on the quarter 655,910 $\frac{1}{2}$.

An Abstract of the Income and Charge of the Consolidated Fund in each of the Quarters ended 10th of October, 1837 and 1838.

INCOME.			CHARGE.		
Description.	Quarters ended 10th Oct.		Description.	Quarters ended 10th Oct.	
	1837	1838		1837	1838
	£.	£.		£.	£.
Customs	3,931,082	3,990,050	Permanent Debt	3,409,803	3,416,521
Excise	3,705,467	4,115,757	Terminable An-		
Stamps	1,622,252	1,751,476	nuities. . . . }	1,386,265	1,391,897
Taxes	308,092	328,045	Interest on Ex-		
Post Office	418,006	410,000	chequer Bills . }	29,585	23,869
Crown Lands . . . . .	..	65,000	Sinking Fund .	302,381	..
Miscellaneous	203,232	231,324	The Civil List. .	53,006	96,411
Total. .	10,188,131	10,891,652	Other Charges .	339,021	498,135
Re-payments of Issues out of the Consolidated Fund in Ireland . . . }	220,545	..	Total Charges	5,520,061	5,426,833
Total Income .	10,408,676	10,891,652	The Surplus .	4,888,615	5,464,819
			Total. .	10,408,676	10,891,652

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ended 21st August and 18th September, 1838.

Quarters ended	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
21st August	£. 19,481,000	£. 10,398,000	£. 29,779,000	£. 23,747,000	£. 9,746,000	£. 33,493,000
18th Sept.	19,665,000	10,040,000	29,705,000	23,846,000	9,615,000	33,461,000

An Analysis of Bankruptcies in England and Wales, shewing the Counties and Trades in which the same occurred, during each Month from July to September, 1838.—(In continuation of Account at page 256).

COUNTIES.	July.	Aug.	Sept.	TRADES.	July.	Aug.	Sept.
Bedford . . . . .	..	..	..	<i>Persons connected with</i>			
Berks	2	2	..	<i>Manufactures.</i>			
Bucks. . . . .	..	..	..	Cotton Trade . . . . .	..	1	3
Cambridge . . . . .	..	..	..	Woollen do. . . . .	..	..	1
Chester . . . . .	..	..	1	Silk do. . . . .	..	..	1
Cornwall . . . . .	..	1	1	Linen do. . . . .	..	..	1
Cumberland	1	..	1	Iron do. . . . .	..	1	..
Derby	1	..	..	Building do.	4	6	4
Devon	2	..	..	Miscellaneous	7	11	4
Dorset	1	..	1				
Durham	1	1	..	<i>Agriculture.</i>			
Essex	1	3	2	Farmers . . . . .	..	..	..
Gloucester.	3	1	2	Corn, Hop, and Hay	..	1	..
Hants.	1	2	1	Dealers . . . . .	..	..	..
Hereford . . . . .	..	1	..	Cattle and Wool Dealers	2	1	1
Hertford . . . . .	..	..	..	Coaches and Horses . . . . .	..	2	1
Huntingdon . . . . .	..	..	..	Brewers, Maltsters, and	..	2	..
Kent	4	6	2	Distillers . . . . .	..	..	..
Lancaster	6	10	7				
Leicester . . . . .	..	..	1	<i>Other.</i>			
Lincoln . . . . .	..	..	3	Innkeepers and Vic-			
Middlesex	16	13	11	tuallars	7	7	9
Monmouth . . . . .	..	1	..	Merchants, Ware-			
Norfolk . . . . .	..	2	..	housemen, Agents,			
Northampton . . . . .	..	..	..	Brokers, and Whole-			
Northumberland	1	..	..	sale Dealers	7	7	9
Nottingham	1	..	1	Tradesmen, Shop-			
Oxford . . . . .	..	..	..	keepers, and Retail			
Rutland . . . . .	..	..	..	Dealers	28	24	10
Salop . . . . .	..	1	1	Miscellaneous	4	2	3
Somerset	3	2	..				
Stafford	1	2	..				
Suffolk . . . . .	..	1	..				
Surrey	1	3	..				
Sussex . . . . .	..	..	1				
Warwick	3	3	2				
Westmoreland . . . . .	..	..	..	
Wilts	1				
Worcester	2	1				
York	7	6	7				
Wales	2	1	1				
Total	59	65	47	Total	59	65	47

JOURNAL

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STATISTICAL SOCIETY OF LONDON.

DECEMBER, 1838.

Third Report of a Committee of the Statistical Society of London appointed to enquire into the State of Education in Westminster.

[Read before the Statistical Society of London, on Monday, November 19, 1838.]

YOUR Committee appointed to enquire into the state of education in the City of Westminster, having reported on the parishes of St. Martin's-in-the-Fields and the Strand Union,* and on those of St. Margaret and St. John,† now submit their Report upon the three remaining parishes in Westminster, viz., St. George, St. James, and St. Anne Soho.

The above three parishes lying contiguous to each other, and being very similar in the character of their inhabitants, may be considered as one large district, bounded on the north by Oxford-street, and on the west by the Serpentine River. The southern and eastern limits are not so easily defined without the aid of a map; a tolerably accurate idea of these boundaries may, however, be formed by a line following the Thames from Chelsea Hospital to near Vauxhall Bridge; thence passing near Buckingham and St. James's palaces, along Pall-Mall and the Haymarket, between the Seven Dials and Soho-square, to the top of Broad-street, St. Giles's.

Within these limits is contained an area of 1310 acres, of which about half is covered with streets, houses and squares, and half is park or other open ground.

The population of these three parishes, according to the census taken in 1831, was as follows:—

	Families.	Males.	Females.	Total.
St. George's Parish .	11,348	26,328	31,881	58,209
St. James's ,, .	8,344	18,019	19,034	37,053
St. Anne's ,, .	3,994	7,567	8,033	15,600
Total .	23,686	51,914	58,948	110,862

Though very large additions have been made to the buildings in the neighbourhood of Belgrave-square since 1831, yet your Committee consider (on grounds which will be hereafter stated) that the total number then given now equals the number of the resident inhabitants within the district.

A very large portion of even the resident population consists of superior tradesmen and people of rank, and a still larger of middling tradesmen and shopkeepers. We forbear to offer any statement of the relative numbers of these classes, but what is more material to our pre-

* See first Publication, 1837.

† See Journal, Nos. IV. and V.

sent purpose, viz., the number of poor families (of families who have not a street-door of their own, and whom a person would visit without first seeking permission) has been ascertained to be 3891;* and assuming, for the sake of argument, that these persons send their children to the Charity, Infant, Common Day and Dame schools, it will be seen by the following Report that 5326 children, or about 13 children in every 10 families of this class, go to a Day school.

The number of schools and scholars in the different parishes are as follows:—

St. George's contains—

Dame schools . . .	32	in which are	450	Scholars.	} Private.
Common Day schools	36	„	737	„	
Middling „	33	„	870	„	
Superior „	8	„	160	„	
	<hr/>		<hr/>		
	109		2217		
Charity „	6	„	752	„	} Charity.
Infant „	4	„	595	„	
	<hr/>		<hr/>		
Schools . . .	119		3564	Scholars.	

To which may be added 7 Sunday schools, containing 951 scholars, of whom 307, as far as your Committee can ascertain, are not in the habit of attending Day schools.

St. James's contains—

Dame schools . . .	10	in which are	231	Scholars.	} Private.
Common Day schools.	7	„	155	„	
Middling „	17	„	657	„	
Superior „	6	„	369	„	
	<hr/>		<hr/>		
	40		1412		
Charity „	10	„	1325	„	} Charity.
Infant „	2	„	385	„	
	<hr/>		<hr/>		
Schools . . .	52		3122	Scholars.	

To which may be added 6 Sunday schools, containing 926 scholars, 307 of whom do not attend Day nor Evening schools.

St. Anne's contains—

Dame schools . . .	4	in which are	78	Scholars.	} Private.
Common Day schools.	12	„	293	„	
Middling „	5	„	144	„	
Superior „	4	„	229	„	
	<hr/>		<hr/>		
	25		744		
Charity „	2		325		} Charity.
Infant „	„		„	„	
	<hr/>		<hr/>		
Schools . . .	27		1069	Scholars.	

To which may be added 5 Sunday schools, containing 707 scholars, of whom 334 do not attend Day schools also.

Besides the above schools, there are 3 Evening schools, containing 28 scholars, in St. Anne's parish; 3 Evening schools, containing 45 scholars, in St. James's parish; and 7 Evening schools, containing

* See Table XXIV. at the end of this Report.

33 scholars, in St. George's parish. All these Evening schools are kept by the masters of Common Day schools, and are generally attended by scholars of a more advanced age than those who attend the Day schools, being chiefly servants and other young persons who are employed during the day in their several vocations.

Hence it appears that the total number of children in the three parishes who receive education in the Dame, Common Day, Infant, and Charity schools, and may be considered as the children of poor parents, is 5826. The children attending Middling schools in these three parishes, and who may be considered as the children of middling tradespeople, are 1671; while the children who attend Superior schools, and who may be considered as the children of superior tradespeople and gentry, are 758. The total number of children at school during the whole or part of the week, including evening scholars, will thus be 7861, exclusive of a small number contained in 9 schools, in which permission to examine was refused, or in which, for some reason, the facts could not be ascertained. The number of children so omitted from the total of day scholars, having been obtained from other trustworthy sources than the teachers, is stated at 197, which number is believed to be nearly correct.

Respecting the Sunday schools, your Committee regret to say that their information is more uncertain. In almost all these schools the question how many children also attend Day schools was very imperfectly, if at all, answered. The whole number of Sunday scholars, however, is 2584, of whom, as they stand in the Report, 1636 attend Day schools likewise.

Your Committee will now proceed to consider these schools according to the quality of the instruction given in them, adopting the same classification as they have followed in their former Reports. The private schools are:—

I.—*Dame Schools.*

These are schools kept by one female, or by a female assisted by a daughter or other relative, and in which little boys and girls are generally educated together in about equal numbers, and for sums averaging 6d. per week, which amount is much beyond what would be charged in any kind of charitable institution. The number visited was 46, containing 759 scholars, in equal proportions of the sexes.

Of these children, 379 are under 5 years of age, and the rest between 5 and 15; but it may be right here to make the general remark, that there is a great uncertainty in these calculations as to ages. The teachers seldom know more of their scholars' ages than the visitor who enquires respecting them; they are therefore distinguished, in a great measure, by guess, and the information on this head which is given in this Report, and the accompanying tables, must be received with this understanding. It is, however, sufficiently correct for the present purpose. The children are sent to these schools mainly with the view of being kept "out of the streets," and in general read from any book which they happen to bring with them from home. Some few learn to write (only 32 out of all the scholars); and some few are said to learn geography and history, by which is meant that these subjects are

treated of in the books which they bring. In these schools a rod, as the instrument of punishment, is generally found upon the table.*

Lastly, a very large portion are sent *avowedly* "to do nothing," the injunction from the parents being, that they are not to be "worried with learning," and in some cases not even "with needle-work." The furniture of the dame's room is generally such as may be seen in a cottage, or in the dwelling-rooms of a gentleman's out-door offices. Frequently there was seen a shelf of old dusty books "given her by the family" with whom she "had lived in place," such as odd volumes of the *Spectator*, old novels, and other refuse of a private library; the Bible, carefully preserved in a green-baize cover, was more rarely observed in these schools than in the Common Day schools; the old newspaper seldom failed. The dames themselves are chiefly persons who have undertaken the task by way of support when other resources have failed: in many cases they were young women who had left service on account of ill health. The number of persons advanced in life was small. In five cases the room in which the school was held was the sole room in which the whole of the family slept and dwelt; in every case but two, it was the only sitting-room. In one instance the school was held in a shop, but none were found in a cellar or garret.

II.—*Common and Middling Day Schools.*

The number of Common Day schools in the three parishes is 55, containing 1185 scholars, or on an average 21 in each school. Of these 486 are boys, and 699 are girls; 341 of the total number, judging from appearance, were under 5 years of age, 14 above 15, and the rest between 5 and 15. The number of Middling Day schools is also 55, containing 1671 scholars, or 30 in each school, which average is about one-half greater than in the Common Day schools. The proportion of the sexes also is different, the number of boys being 882, and that of girls, 789. Of the total number, 95 are under 5 years of age, 35 above 15, and the remaining 1541 between the two ages.

In the tables the Common Day schools are distinguished as Boys' Schools, Girls' Schools, and Schools for Boys and Girls. Those are designated boys' schools which are kept by a master, and in which the majority of children are boys, though in some instances girls are also sent there to learn to write and cipher—a general notion seeming to exist that men alone can teach these subjects. The other two classes of Common schools are kept by females, and are in fact little else than superior Dame schools.

The education given in all these Common schools, is very imperfect; the points on which most stress is laid are writing and arithmetic; the parents are more anxious, and make more enquiries about these than about any other branch of their children's education; they are, in fact, the only branches in which they are judges, and the teachers knowing this, are naturally induced to pay more attention to them.

The Bible and Testament seem to be universally used in both the Common and Middling Day schools as *class books*, or books in which the children learn to spell and read.

* These rods may be seen in bales at a shop in Robert-street, Groevenor-square, and are sold retail at a farthing a-piece.

III.—*Superior Schools.*

Of these schools there are 18 in the district, of which a detailed and accurate account is contained in the tables. This account was chiefly taken for the purpose of completing the general plan which your Committee had in view, and of ascertaining the number of children receiving education in them.

It is therefore unnecessary for your Committee to say anything more concerning them, or to give any more information than is conveyed in the accompanying tables. Indeed, the small number of such schools in each parish might render anything that might be said concerning them, personal, and therefore improper.

In St. George's parish there is a Proprietary school, in connection with King's College, from which no return has been obtained. This, however, is of less consequence, as a considerable portion of the scholars probably come from other districts.

IV.—*Charity Schools.*

Charity schools are divided into—

1. A Parochial school, in which 110 children are boarded, clothed, and fed.
2. National or Parochial Day and Sunday schools, of which there are 14, containing 1731 children. Of these 1072 receive gratuitous instruction; the rest pay from 1*d.* a week to 1*s.* 6*d.* a month.
3. British and Foreign schools, of which there are 3, containing 561 scholars, all of whom pay either 2*d.* or 3*d.* a week.
4. Infant schools, of which there are 6, containing 980 children, who pay 1*d.* or 2*d.* a week.
5. Sunday schools, of which there are 18, some connected with Charity Day schools already enumerated, and some independent of any Day school. The total number of children attending them is 2584, of whom 1636 are, as far as your Committee can ascertain, also attend Day schools.

Some observations concerning the relative merits of these schools will be seen below, and a detailed statement of the manner in which they are maintained and conducted, will be given in the Appendix to this Report.

Your Committee propose now to offer some general remarks suggested by the information which they have collected, and the circumstances under which it was obtained.

1. It is almost impossible to institute a fair comparison between the total population of this district and the number of children receiving education in schools.

There is always a difficulty in defining what ought to be considered "*resident population*;" and in the case of these three parishes, the difficulty is greater than usual, because they are subject both to periodical increase and decrease.

There is an increase every spring, caused by the immigration of a certain number of families, who come from their country to their town residences, and by a much greater number of families who take houses in London for the season. On the other hand, there is a decrease every

autumn to a still greater extent, caused by the return of the gentry to the country, and by the tradesmen's families making short visits to the sea-side, or to their friends in the country. The former of the changes does not appear to affect the schools in any perceptible degree; but the latter has considerable effect on the Middling schools, so much so, that one quarter's profit is in consequence often lost to the teachers.

The total population of the three parishes, according to the census of 1831, was 110,862, but in a note appended to the return from St. George's parish, it was stated that the number of persons would have been 2000 more, but for the families then out of town. Admitting that the dissolution of Parliament in the month of April in that year may have caused the absence from London of a certain number of families interested in the approaching elections, yet, as the census was made on the 1st of June, your Committee cannot but consider that the number of families visiting the metropolis at that season, who had no immediate interest in the elections, and would not therefore give up their houses until the expiration of their term, must have considerably increased the population returns of these parishes; and therefore, in the absence of more certain data, reckoning this number by way of balance against the increase of inhabitants in the neighbourhood of Belgrave-square, your Committee conclude that the number stated in the Parliamentary Returns of 1831, will sufficiently well express the present resident population of the district. Upon this assumption, and calculating according to the proportions indicated by the Population Returns of Middlesex in 1831, it would appear that out of this number there are 21,502 children between 5 and 15, of whom, according to Table XXI., 6713, or 31·2 per cent., are receiving some kind of education in schools within the district.

2. Your Committee consider that the general aspect of the schools in this district is superior to that of the schools which they have previously examined in the other portions of Westminster; and they attribute this superiority in a great measure to the more stationary habits of the people. It would seem that the high rate of wages which able workmen in each branch of retail trade are sure of obtaining in a neighbourhood which contains so many good shops, operate to keep them fixed in this locality; and on this ground it is probable that (allowance being made for the periodical migrations above alluded to) the population of this district is more stationary than that of any other part of the metropolis. It is reasonable to suppose that these stationary habits of the middle and lower orders should render them more respectable, and produce a corresponding good effect upon the scholars and upon the schools.

3. With regard to the rank and condition of the persons who send their children to the several classes of schools visited by your Committee, it has been before stated that the scholars in the Superior schools are chiefly the children of superior tradesmen and gentry. But the number of these (only 758) is exceedingly small, when compared with the large population of this class within the district; and even of this number 150 ought to be omitted from the estimate, as they are boarders, who come from distant parts. The circumstance of so small a number of scholars in the Superior schools is readily accounted for by the general practice adopted by almost all who have the means, of sending children into the country, or into the suburbs of London, to be educated. The

Middling schools are resorted to by the children of middling tradespeople, although there are many instances in which children of mechanics are to be found in them.

The Common Day schools are generally attended by the children of small tradespeople, and the Dame schools by those of mechanics and labourers who are above receiving a charitable education for their children, or allowing them to mix with what they call "low company." Sometimes, however, these schools are resorted to from other motives; from the prejudice, so common in town as well as in the country, that nothing is effectually taught where no payment is demanded;—from unwillingness to comply with restrictions as to cleanliness which are enforced, more or less, in all Charity schools;—and too often, in cases where there is no perfectly gratuitous Charity school at hand, from a hope of escaping payment altogether by sending the child to a Dame's school, as long as the dame will receive it on trust, and then leaving the neighborhood without paying at all.

The British and Foreign schools rank next to the Dame schools with regard to the condition of the persons who send their children to them, while the schools of the National Society rank in this respect last of all. Your Committee believe that this distinction is principally owing to a costume being given in the endowed National schools, which the children are expected to wear as long as they continue at the school. To this dress the poor are generally averse. Such as are in any degree raised above want will sooner forego the pecuniary advantage, than condescend to allow their children to bear the marks of charity. Another cause of the same kind is to be found in the regulation obliging the children, girls as well as boys, to wear short hair, which is enforced in most National schools, and which, as may be supposed, prejudices mothers against them. Lastly, the regulations as to cleanliness (important and excellent as they are), are nevertheless attended with a certain degree of trouble and expense to the parents, and indispose them, when their circumstances give them the choice, to send their children to those schools in which they are observed.*

* It might perhaps occur to some persons that the most obvious reason for the British and Foreign schools being resorted to by children of a superior class to those who attend the National schools, is to be found in the circumstance that the instruction in the latter is sometimes entirely free, while in the former, a small sum is generally charged; and that necessitous persons would therefore naturally prefer to send their children free, while those of better condition would take a pride in paying for their education. No doubt this circumstance has some weight, but not so much as is generally supposed. Your Committee are aware that the opinion prevails among many who are interested in the education of the lower classes, that the poor prefer to send their children to schools in which they pay for some part of their education, or, as it is usually expressed, "they like to pay for their children's schooling." This is no doubt true in many cases, but your Committee, judging from the frequent complaints which they heard during the progress of their enquiries of the difficulty of obtaining the money due from the parents, have great doubts whether it is so universal as is supposed. The master of the Parochial school of St. Anne's made a remark to their agent which appears to be original, and to give the true solution of the question. "Ask a parent," he observed, "to pay the whole value, or what he considers the whole value, of his child's education, and he will make an effort to do so, as is proved by the preference which parents give to private schools. But offer him a charitable education, and he expects to receive it gratis. He is ready to pay for the whole instruction of his children, but he will not "*condescend*" to receive charity and pay likewise."

4. Looking to the relative merits of the Charity schools in the district, your Committee would say, that in point of cleanliness and regularity, the National and Parochial schools, and particularly St. George's National school for girls, are the best.

The British and Foreign schools are behind these in the above-named particulars; but it may be doubted whether they have not an advantage in some other respects. In these the true relation between teacher and pupil seems to be better understood; the children themselves have more energy, are more attentive to their business, and seem more impressed with the idea that they are sent to school to learn, and not to waste their time. In the National schools the master is usually looked up to as a *master* in every sense of the word; in the British and Foreign schools he is addressed more as a friend, and treated with considerable, but not unbecoming, familiarity. In the former a rod is generally used to punish the children; in the latter it was never observed. The distinction here noticed between the schools of the two Societies is observable also in the other districts which your Committee have examined.

There are 6 Infant schools in this district; one of which, St. Mark's, is perhaps the best school of its kind. It has a clothing fund, a lending library, and a children's savings' bank attached to it; and the wholesome effect of the last-named institution was proved, as soon as it was commenced, by the discontinuance of two sweetmeat shops in the immediate neighbourhood. St. James's is the next best Infant school in the district.

5. With respect to private schools, it is observable, that in the common and middling classes of schools, a considerable difference exists between girls' and boys' schools, or rather between those which are kept by masters, and those which are kept by females, for among the younger scholars the sexes are little separated.

The schools which are kept by females are designated in this Report as Dame schools, Common Girls' schools, and Middling Girls' schools. As there is no regular system followed in these schools, the children are well or ill educated, exactly in proportion to the efficiency of their respective mistresses. In cases where there is an able, active, middle-aged, motherly female, of mild temper, and accustomed to children, but without any family of her own, and with no employment except the care of the scholars, the children under her perhaps receive a better education, and are more attended to, than in any other description of schools. On the contrary, in cases where the mistress has taken up the profession merely as a resource in old age—where she has been obliged to leave her previous situation through continued ill-health, and tries this in the absence of all other means of support—where she has a large family of her own—or, lastly, where she keeps a cake-shop together with her school, and makes one establishment a means of attracting customers to the other, in these cases the degree of education which the children receive may be easily imagined.

Of the Common Boys' schools it is very difficult to speak with impartiality. Devoid of that appearance of cheerfulness and domestic comfort which belongs to schools kept by females, and equally devoid of that kind of interest which attaches itself to charitable institutions, they always give the visitor an unfavourable impression; nor is it until he

has been there some time that this impression wears off, and that he begins to observe that these schools are often conducted—not perhaps on any elaborate system, nor certainly with the best selection of books,—but still with ability and judgment in those branches which the masters profess to teach.

Of the Middling schools for boys, your Committee are able to say less, because they were seldom admitted into the room in which the boys were assembled. As far as they could judge of the masters by one conversation with each, their opinion of them is decidedly favourable. One or two were more like commercial travellers than persons whom a parent would wish to entrust with the care of children; one or two were very young, and some far advanced in years. A large majority, however, seemed to be aware of the difficulty of performing a schoolmaster's duty well, and had, notwithstanding, made up their minds to encounter it.

6. Most of the masters and mistresses, from the highest to the lowest, professed to give their children a "*moral and religious*" education, but how far this profession is really acted up to in practice, it is impossible for your Committee to say.

It is true there are some few exceptions to the above rule with respect to religious instruction; but, so few, as in a manner to prove the general rule. Where masters professed to decline interfering with the religious instruction of their pupils on account of the sectarian opinions of the parents, it is not unlikely, and it certainly is a fact in one instance, that these very masters were the most disposed to promote piety and religion to the utmost of their power.

It will be observed, on inspecting the table at the end of this Report (*see* Table X.), how large a proportion of the Superior, Middling, and Common Day schoolmasters are of the Established Church. Your Committee have no means of accounting for this circumstance, as the same proportion by no means holds good with respect to the middling population of the district, judging by the number of dissenting chapels. No column in the tables represents the number of communicants. The question was not asked sufficiently often to give a definite result; but, as far as your Committee can speak from the reports of the agents, at least 20 per cent. were either communicants of the Established Church or communicating members of dissenting bodies.

7. With respect to the books which are generally used in these schools, a visitor cannot help being struck with the sameness and common-place character of them all.

In the Dame, Common Day, Middling, and even in the Superior schools, the same unvaried catalogue of books prevails; viz., Pinnock's works, Murray's Abridgment, Vyse's Spelling-book, Mavor's ditto, Guy's ditto, Carpenter's ditto, &c. &c.

Your Committee are not aware that in any one instance they met with a publication of the Religious Tract Society, or of the Society for the Diffusion of Useful Knowledge; nor, excepting in one school, in which a Saturday Magazine was read by the boys in a class, did they meet with any publication of the Society for Promoting Christian Knowledge: of all other new publications and helps to education, there exists an equal dearth.

It will naturally be asked—what can be the cause of this adherence to one routine of books? The cause must certainly not be looked for on

any principle of economy, for Vyse's, Carpenter's, and Mavor's Spelling-books cost 1s. 6d. each; and any of the publications of the above-named Societies, containing quite as much or more matter, would cost 1d. Your Committee apprehend that one cause is to be found in that strong aversion which the middle and lower orders entertain against anything which can in any way be construed into charity. A dame, when asked by one of your Committee what was the reason she did not supply herself with some of the "Society's Cards," in preference to the torn leaves of a Dictionary, from which the children were learning to spell, replied, that such a measure would immediately be followed by the removal of all the children from the school. Another cause is to be found in the large per-centage which the publishers of these books allow to the proprietors of the schools—a kind of profit which the masters of the best schools do not hesitate to acknowledge, and which, indeed, there is no reason to conceal.

8. It only remains to add a few remarks on the condition of the schools in this district with regard to ventilation, cleanliness, &c. Those which have been designated in this Report as Superior and Middling Day schools are situated, for the most part, either in large and open streets, or in squares; and the comfort and cleanliness of them are, to say the very least, equal to that which the children can be supposed to enjoy at their own homes.

The Dame and Common Day schools are often in narrow and dirty streets, of which enough are to be found even in this part of the metropolis. Still none of them are so badly ventilated as to be offensive, and certainly none can bear any comparison with those of Liverpool and Manchester, as described in the Reports of the Statistical Society of the latter place. There are some of the Common Day schools which would be noticed for their cleanliness and neatness even in a country village; and it is somewhat singular that these good specimens of schools occur more often in the old and crowded parts of the district, such as the neighbourhood of Wardour-street and Berwick-street, Soho, than in the more open and recent parts about Eaton and Belgrave squares. Even in the least creditable among them, the description of dirt is rather what might be expected in an untidy servant's bed-room than in the small and inconvenient dwellings of mechanics and labourers in a populous city.

9. Your Committee are unwilling to close this account of the state of education in the city of Westminster, without making some remarks on the character and condition of the persons with whom they have come into contact in the prosecution of their labours.

First. They would acknowledge the kindness with which the superintendents of the different schools furthered the object they had in hand. Except in a few instances, the questions proposed were cheerfully answered, and no other pledge was exacted from the visitors, than their assurance that the enquiry was made simply for the purpose of eliciting truth.

Secondly. They consider it their duty to remark, that, although they witnessed the most distressing cases of poverty in their visits, yet was never a hint given of a present being expected in return for the information afforded, nor was there even an allusion to such a subject.

Lastly. There is another circumstance, though of a different kind,

which is in its way quite as characteristic of an English city as those before-mentioned, viz., the almost total absence of idiocy, of deformity, or of other dreadful calamities incident to human nature, whether among the children at school, the families of the teachers, or the families which your Committee and their agents visited in search of schools. Your Committee trust that these remarks are not altogether irrelevant to the subject of an enquiry which so nearly concerns the moral and physical condition of Westminster—a city in which they may fairly add that they have visited and spent a considerable time in 500 houses, without invitation or announcement, often at inconvenient hours, and always for what might be considered an inquisitive purpose, and yet have experienced nearly unvaried civility, and the greatest readiness to afford information without any expectation of immediate benefit or reward.

TABLE I.—DAY SCHOOLS.

Summary of Schools, and of Children receiving Education, exclusive of Sunday Schools.

DESCRIPTION.	Number of Schools.	Number of Teachers.	Number of Scholars.		
			Boys.	Girls.	Total.
Dame Schools	46	47	390	379	759
Common Day Schools for Boys . . .	6	6	486	699	1185
" Girls . . .	20	29			
" Boys and Girls . . .	29	39	882	789	1671
Middling Day Schools for Boys . . .	19	30			
" Girls . . .	36	61	381	377	758
Superior Day Schools for Boys . . .	5	17			
" Girls . . .	13	39			
Total of Day Schools supported solely by the Parents	174	268	2129	2244	4373
Infant Schools assisted by the Public . .	6	10	580	400	980
Charity Schools, and Schools attached to Public Institutions	18	21	1481	921	2402
Total of Day Schools	198	299	4190	3565	7755
" of Evening Schools	13	..*	48	58	106
Total of Day and Evening Schools .	211†	299	4238	3623	7861

* All the Evening Schools are kept by masters of Day Schools.

† Exclusive of 9 Schools, from which no returns could be obtained.

TABLE II.—DAY SCHOOLS.

Date of Establishment.

There were founded in or before 1820, 4 Day schools, 13 Common and Middling Day schools, 4 Superior schools, and 10 Charity schools; of these latter 2 were founded in the 17th, and 4 in the 18th Century.

Between 1821 and 1830 were founded 2 Dame schools, 22 Common and Middling Day schools, 6 Superior schools, 1 Infant, and 6 Charity schools.

Since 1830 were founded 40 Dame schools, 75 Common and Middling Day schools, 8 Superior schools, 5 Infant, and 2 Charity schools.

TABLE III.—DAY SCHOOLS.

Statement of the Ages of the Children in Day and Evening Schools.

	Under 5 Years.	Between 5 and 15 Years.	Above 15 Years.	Total.
Dame Schools	379	380	..	759
Common „	341	830	14	1185
Middling „	95	1541	35	1671
Superior „	23	621	114	758
Infant „	687	293	..	980
Charity „	50	2179	173	2402
Evening „	3	83	20	106
Total	1578	5927	356	7861

TABLE IV.—DAY SCHOOLS.

*Modes in which the Schools are supported.**Wholly Free.*—No part of the expense being borne by the scholars.

Clothes, board, and education are provided in one school—the Burlington school, containing 110 girls.

Clothes and education are provided in the following 6 schools for all the children who are in the school at the time when the former are distributed; viz., St. George's National schools for boys and girls; Belgrave National schools for boys and girls; the Offertory school, and St. Anne's Parochial school. The number of the children is 840, of whom 580 are boys, and 260 are girls.*

Education is provided for all the scholars in 3 schools; viz. St. James's Sunday and Evening schools for boys and girls, and the Knightsbridge National school, and for 40 out of 58 boys in Archbishop Tenison's school. The number, therefore, of boys receiving gratuitous education alone is 231, and of girls 101, in all 332.

Partially Free.—Part of the expense being borne by the scholars.

	Boys.	Girls.	Total.
In Charity schools	670	450	1120
In Infant schools	580	400	980
Total number paying part of the expense . . . }	1250	850	2100

Not Free.—The whole expense being borne by the scholars.

There are in the Dame, Common, Middling, and Superior Day schools, 4373 scholars, with 106 in Evening schools; making in all 4479, of whom 2177 are boys, and 2302 are girls, whose parents pay for their education.

Of the 18 Charity Day schools, 9 are either wholly or partially supported by public subscriptions, together with collections at churches or chapels. An endowment is distributed among 4 of these: 7 are supported by a public subscription; 1 by a share of the pew-rents in Archbishop Tenison's chapel, and 1 by the sacramental offerings in St. James's church.

Of the 6 Infant schools 5 are supported wholly by subscription, and the children's payments of 1*d.* or 2*d.* per week; and one is chiefly supported by an individual lady.

The expenses of the Sunday schools are defrayed in 7 instances by collections and subscriptions; in 5 by the former, and in 3 by the latter mode alone. Two are supported out of the funds of the National schools with which they are connected. In one instance, the information was not obtained.

* In the Charlotte Street chapel school, also, all the children, consisting of 72 girls, are clothed.

TABLE V.—DAY SCHOOLS.

Statement of the Weekly, Quarterly, or Annual Charge for Instruction in Schools supported entirely by Payments of the Scholars.

Rates of Payment.	Dame.		Common Day.		Middling.		Superior.	
	Schools	Scholars	Schools	Scholars	Boys and Girls.		Boys and Girls.	
					Schools	Scholars	Schools	Scholars
Weekly.	£. s. d.							
	0 0 3	2	16	..	..	..	..	..
	0 0 4	6	50	..	..	..	..	..
	0 0 6	30	551	3	61	..	..	..
	0 0 8	5	92	10	215	..	..	..
	0 0 9	..	..	3	62	..	..	..
	0 0 10	1	8	6	132	..	..	..
	0 0 11	..	..	1	18	..	..	..
	0 1 0	1	24	18	423	g 1	34	..
	0 1 2	..	..	1	35	..	..	..
	0 1 3	..	..	..	b 1	20	..	..
	0 1 4	..	..	1	30	..	..	..
	0 1 6	..	..	1	30	..	..	..
Quarterly.	0 8 0	..	..	1	17	..	..	..
	0 10 0	1	18	..	..	..	..	..
	0 12 0	..	..	..	g 3	88	..	..
	0 13 0	..	..	1	26	..	..	..
	0 15 0	..	..	1	30	b 4	234	..
	0 16 0	..	..	..	g 6	108	..	..
	0 18 0	..	..	..	g 1	45	..	..
	1 1 0	..	..	6	78	g 1	24	..
	1 2 0	..	..	1	20	b 10	391	b 1
	1 5 0	..	..	..	g 16	399	g 4	90
	1 10 0	..	..	..	..	..	..	..
	1 11 6	..	..	1	8	b 1	23	..
	2 2 0	..	..	..	g 2	36	..	..
	3 13 6	..	..	..	..	..	g 1	17
	Boarding Schools.						b 3	270
	£. £.						g 4	173
Per Annum.	25 to 30	..	..	..	..	..	g 1	29
	40 to 50	..	..	..	..	..	b 1	17
	50	..	..	..	..	..	g 1	19
Total . .	46	759	55	1,185	51	1,492	18	758
Average Weekly Charge . .	6d.		10½d.		Boys. 1s. 3d. Girls. 1s.		Exclusive of Boarding Schools. Boys. 1l. 8s. 1½d. Girls. 1l. 12s. 10½d.	
	10s.		18s. 2d.		1l. 1d. 1l. 0½d.			

Note.—In the Dame schools the charge above specified is for reading and needle-work, and does not include writing, or other extras, which are rarely taught in this class of schools. In the other schools the highest charge has been taken, excluding French, and other similar extras.

TABLE VI.—DAY SCHOOLS.

Subjects professed to be Taught in each Class of Schools.

SUBJECTS.	Number of Children under Instruction.						
	Dame.	Common.	Middling.	Superior.	Evening.	Charity.	Total.
Reading . .	498	964	1642	748	102	2378	6332
Writing . .	32	423	1306	719	105	1935	4520
Arithmetic. .	5	348	1274	738	95	1960	4420
Sewing . .	297	539	756	321	2	905	2820
Knitting . .	13	11	25	..	..	110	159
Grammar . .	23	374	1161	724	83	596	2961
Geography. .	10	250	991	649	56	437	2393
History . .	10	248	1016	473	68	686	2491
Drawing . .	..	6	88	107	1	288	490
Classics . .	..	..	66	18	1	..	85
French . .	..	3	177	372	5	..	557
Geometry . .	..	9	50	54	4	..	117
Mensuration .	..	13	50	51	5	87	206
Total Number of Scholars in all the Schools)	759	1185	1671	758	106	2402	..
Domestic Duties	..	..	..	..	..	280	280
Morals . .	759	1185	1671	758	15	2378	6766
Religious Duties	759	1185	1581	515	..	2378	6418

Note.—The Infant schools are omitted in this Table, because it would be impossible to draw the line between those who do, and those who do not, learn reading, arithmetic, geography, history, &c.

TABLE VII.—DAY SCHOOLS.—*Instruction professed to be received.*

Dame schools—total number, 46. In 4 of these the children are classed; in 32 the mistresses profess to question the children in what they learn; the monitorial system is not followed in any; there are no visitors nor periodical examinations.

Common Day schools—total 53. Classes in 31; children questioned in 54; and periodical examinations in 3. The monitorial system is not adopted in any.

Middling Day schools—total 55. Information not obtained from 2. Classes in 45; monitorial system in 2; children questioned in 51; periodical examinations in 19.

Superior Day schools—total 18. Children classed and questioned in all; monitorial system in one boys' school; and periodical examinations in 12.

Infant schools—total 6. Children classed and questioned, and monitorial system adopted in all; appointed visitors in 5; and periodical examinations in 3.

Charity schools—total 18. Scholars classed in 16; monitorial system adopted, and children questioned in all; appointed visitors in 14; and periodical examinations in 15.

Evening schools. In one only the scholars are questioned; in the rest there were neither classes, monitorial system, visitors, nor periodical examinations.

TABLE VIII.—DAY SCHOOLS.—*Instruction in Geography.*

Maps and Globes are used in 1 Common Day school for boys; in 10 Middling Day schools for boys, and in 15 for girls; in all the Superior schools for boys, and in 11 of those for girls—in all 42 schools.

Maps only are used in 23 Common Day schools; in 5 Middling Day schools for boys, and in 15 for girls; in 2 Superior schools for girls; in all the Infant schools, and in 3 Charity schools—in all 54 schools.

In the remaining 102 schools; viz., 46 Dame schools, 31 Common Day schools, 7 Middling schools (no information having been obtained upon this point from 3), and in 15 Charity schools, neither Maps nor Globes are used.

TABLE IX.—DAY SCHOOLS.

Schools with Lending Libraries, and Charitable or Provident Societies attached to them.

Three schools; viz., the St. James's National schools for boys and girls, and the Infant school connected with them, have a Lending Library, a Clothing and Benefit Society, and a Savings' Bank. The St. George's Infant school has a Lending Library, with a Clothing Society and Savings' Bank. In the school established by the Christian Benevolent Society in Ship-street, there is a Lending Library, with a Savings' Bank; and the same are found in Archbishop Tennison's school. In the 2 National schools of St. George, the Charlotte-street Chapel School, and the National School of St. Anne, there is a Lending Library, and all or part of the scholars are clothed. In the Belgrave-street National schools, and the Offertory school, the children are clothed.

TABLE X.—DAY SCHOOLS.

Information relative to the Teachers of the Day and Evening Schools.

Dame Schools, Teachers 46.

Of these 23 have no other occupation, 22 have.

31 were born and educated in London, 14 in the country, and 1 in Ireland.

7 profess to have been educated for the employment, and 39 do not.

32 are members of the Established Church, and 14 are Dissenters.

Common Day Schools, Teachers 55.

Of these 52 have no other occupation, 3 have.

35 were born and educated in London, 19 in the country, and 1 in Ireland.

25 profess to have been educated for the profession, 30 do not.

43 are members of the Established Church, and 11 are Dissenters.

Middling Day Schools, Teachers 55.

Of these none have any other occupation.

32 were born and educated in London, 19 in the country, 1 in Ireland, and 1 in the East Indies.

39 profess to have been educated for the profession, 15 do not.

50 are members of the Established Church, and 5 are Dissenters.

Superior Day Schools, Teachers 18.

Of these 17 have no other occupation, 1 has.

12 were born and educated in London, and 6 in the country.

15 profess to have been educated for the profession, 3 do not.

14 are members of the Established Church, 4 are Dissenters.

Infant Schools, Teachers 6.

Of these none have any other occupation.

5 were born and educated in London, and 1 in the country.

5 profess to have been educated for the profession, 1 does not.

5 belong to the Established Church, one is a Dissenter.

Charity Schools, Teachers 18.

Of these none have any other occupation.

10 were born and educated in London, and 8 in the country.

10 profess to have been educated for the profession, 8 do not.

14 belong to the Established Church, 4 are Dissenters.

Total, 198 Teachers.

Of these 171 have no other occupation, 26 have.

125 were born and educated in London, 67 in the country, 3 in Ireland, and 1 in the East Indies.

101 profess to have been educated for the profession, 96 do not.

158 are members of the Established Church, 39 are Dissenters.

Note.—All the Evening schools are kept by Masters of Day schools. The Principals only of schools are included in the above abstract. Where the figures do not agree with the total numbers, which occurs only in two trifling instances, the necessary information could not be obtained.

TABLE XI.—DAY SCHOOLS.

Time which the Teachers in Day and Evening Schools have been engaged in that office.

SCHOOLS.	Total Number of Schools.	Number of Years engaged in Teaching.								
		Less than 1.	1 and less than 2.	2 and less than 3.	3 and less than 4.	4 and less than 5.	5 and less than 10.	10 and less than 20.	20 and upwards.	Not ascertained.
Dame Schools. . . .	46	11	9	6	3	3	7	6	1	..
Common Schools. . .	55	5	7	2	4	4	11	13	8	1
Middling Schools. . .	55	2	1	3	2	2	10	12	23	..
Superior Schools. . .	18	..	..	1	..	..	5	5	7	..
Infant Schools. . . .	6	..	2	..	..	1	3	..	..	..
Charity Schools. . . .	18	1	2	..	..	1	5	5	4	..
Total.	198	19	21	12	9	11	41	41	43	1

TABLE XII.—DAY SCHOOLS.

List of Books found in the Dame and Common Day Schools.

Titles of Books.	Dame.	Common Day.	Titles of Books.	Dame.	Common Day.
Bible.	28	55	Murray's Grammar. . .	1	12
Testament.	30	51	— Do. abridged. . .	..	27
Prayer Book.	7	5	— First Book. . .	1	1
Watts's Hymns. . . .	7	6	— Introduction to		
Various Catechisms. .	6	9	Reading. . . . .	..	4
United Brethren's Text-book	1	..	Guy's Geography. . . .	..	1
Little Hymns.	1	..	— Exercises. . . . .	..	1
Infant's Guide.	1	..	Enfield's Speaker. . . .	..	8
Spelling Books, Vyse's. .	17	14	— Reader. . . . .	..	3
— Mavor's.	19	38	Blair's Class Book. . . .	..	2
— Guy's.	6	20	— Reader. . . . .	..	2
— Carpenter's. . . .	3	16	Magnall's Questions. . .	..	4
— Fenning's.	3	2	Æsop's Fables. . . . .	..	2
— Other.	1	15	Johnson's Dictionary. . .	..	3
Pinnock's Catechisms. .	8	..	Entick's ditto. . . . .	..	1
— Works. . . . .	..	27	Geography and History, by		
Various Primers. . . .	26	29	a Lady. . . . .	..	1
Reading made easy. . .	4	..	Elmes's Instructor. . . .	..	1
Entick's Dictionary. . .	1	..	Life of Josephus. . . . .	..	1
Various Alphabets. . .	46	..	History of England. . . .	..	1
Child's Instructor. . . .	1	..	Narrative Pieces. . . . .	..	1
Dr. Mablin's Reading easy.	1	..	Scott's First Rudiments. .	..	1
Walkinghame's Arithmetic	1	24	— French Rudiments. . .	..	1
Bonnycastle's ditto. . .	..	3	Cocker's Instructor. . . .	..	1
Arithmetical Tables. . .	..	2	Miscellaneous Questions. .	..	1
Davies's Reading made easy	1	..	Levizac's Grammar. . . .	..	2
Goldsmith's England. . .	2	22	Perrin's Fables. . . . .	..	1
— Rome. . . . .	..	9	Téémaque. . . . .	..	1
— Greece. . . . .	..	6	Wilkins's S. C. B. . . . .	..	1
— Natural Hist. . . .	..	1	Rundell's S. II. . . . .	..	1
— Geography. . . . .	..	13	Ackworth's Vocabulary. .	..	1
— First Step to			Guthrie's Geography. . . .	..	1
Knowledge. . . . .	..	1	Murray's ditto. . . . .	..	1
Brown's Catechism. . . .	1	..	Abbé Gaultier's Works. .	..	1

TABLE XIII.—SUNDAY SCHOOLS.

Summary of Sunday Schools, and of the Scholars on the Books and in Average Attendance.

RELIGIOUS DENOMINATIONS.	Number of Schools.	SCHOLARS.						Average Attendance.	Per Centage of Attendance on the Books.	Average Number of Scholars in Attendance to a School.
		AGE.			SEX.		Total Number of Scholars on the Books.			
		Under 5 Years.	Between 5 and 15.	Above 15 Years.	Boys.	Girls.				
Church Establishment	5	66	435	180	305	376	681	568	83.3	113
Independent . . .	8	46	1198	43	603	684	1287	882	63.5	110
Presbyterian . . .	2	14	248	23	154	131	235	170	59.6	85
Wesleyan . . .	2	20	156	20	85	111	196	115	59.6	57
Baptist . . .	1	23	106	6	70	65	135	110	81.4	110
Total . . .	18	169	2143	272	1217	1367	2584*	1845	71.4	103

* The exact proportion of this number who also attended Day Schools, could not be obtained. In 12 schools it was given; these contained 1641 scholars, of whom 1043, or 63 per cent., attended Day schools likewise. If the same proportion be applied to the remaining 6 schools, the total number of Sunday scholars, who attend Day Schools, will be 1636, leaving 948 who receive only Sunday instruction.

TABLE XIV.—SUNDAY SCHOOLS.—*Date of Establishment.*

	Schools.	Scholars.
In or before 1820 . . .	6	916
From 1821 to 1830 . . .	7	1009
Since 1830 . . .	5	659
Total . . .	18	2584

TABLE XV.—SUNDAY SCHOOLS.—*Size of Sunday Schools.*

Number of Sunday schools in which the scholars on the books do not exceed 100 . . .	3
Number of Sunday schools in which the scholars on the books do exceed 100 . . .	15
The average attendance do not exceed 100 . . .	9
„ „ do exceed 100 . . .	9
	18

TABLE XVI.—SUNDAY SCHOOLS.—*Number of Scholars to a Teacher.*

Denominations.	Schools.	Teachers.	Average No. of Scholars Attending.	Average No. of Scholars to a Teacher.
Established Church . . .	5	54*	568	10½
Independent . . .	8	137	882	6½
Presbyterian . . .	2	24	170	7
Wesleyan . . .	2	26	115	4½
Baptist . . .	1	22	110	5
Total . . .	18	263	1845	7

* At one of these schools the number of teachers was not given in the return—it has been assumed to be 10. In 2 others the schools are conducted by a single master and mistress. If these 2 schools were omitted, the average number of scholars to each teacher in the schools connected with the Established Church would be 6½.

TABLE XVII.—SUNDAY SCHOOLS.—*Employment of School Hours.*

In 1 school	Total Time in School.	Time devoted to direct instruction.	In 1 school	Total Time in School.	Time devoted to direct instruction.
	Not stated.	2½ hours.		3½ hours	3 hours.
1	2 hours.	2	1	4	Not stated.
1	2½	2½	1	4	4 hours.
1	3	2	1	4½	4
2	3	3	1	4½	1½
1	3½	Not stated.	1	4½	3½
1	3½	2½ hours.	1	4½	4
1	3½	2½	2	Not stated.	Not stated.

TABLE XVIII.—SUNDAY SCHOOLS.—*General Mode of Conduct.*

In 12 out of 18 schools there are appointed visitors.
 Examinations are held in 7 schools, and no examinations in the remaining 11.
 The monitorial system is followed in 3, and not followed in the remaining 15.
 In 13 schools the children are questioned in what they learn, and in 5 they are not so questioned.

TABLE XIX.—SUNDAY SCHOOLS.

Libraries and Societies attached to Sunday Schools.

A Lending Library is attached to 10 schools, containing 1436 scholars.
 A Lending Library and Clothing Society are attached to 1 school, with 135 children.
 The same, with a Sick Fund for the children, are attached to 2 schools, containing 360 scholars.
 A Lending Library and Saving's Fund for children is attached to 1 school, with 158 scholars.
 Two schools, containing 273 children, have no Library nor Society attached.
 Two schools, containing 222 children, are immediately connected with a Day school to which there are attached a Lending Library, a Clothing and Benefit Society, and a Saving's Bank.

TABLE XX.—*List of Schools supported wholly, or in part, by Endowment, Public Subscription, or by Individuals; or attached to a Place of Worship, or a Public Institution.*

No.	SCHOOLS.	PARISHES.	Date of Establishment.	Number of Teachers.	AGE.				SEX.		Total Number of Scholars.
					Under 5 Years.	Between 5 and 15.	Above 15.	Boys.	Girls.		
SUNDAY SCHOOLS.(a)											
1	St. Mark's	St. George's .	1831	12	48	100	10	76	89	155	
2	Charlotte-street Chapel	"	1831	30	..	193	..	53	147	193	
3	New Ranelagh-road	"	1827	6	30	30	..	21	29	50	
4	Gillingham-street	"	1836	11	..	150	..	60	60	120	
5	Oxford Buildings	"	1833	6	11	69	..	56	24	80	
6	Robert-street	"	1818	20	20	220	..	110	130	240	
7	Shepherd's Market	"	1816	12	..	110	..	50	60	110	
8	St. James's, Male	St. James's. }	1827	11	..	12	130	122	..	142	
9	" Female	"	"	1	..	40	40	..	80	80	
10	Craven Chapel, Male	"	1825	20	15	144	8	167	..	167	
11	" Female	"	1823	30	..	205	5	..	210	210	
12	Scotch Church	"	1808	14	14	144	23	90	91	181	
13	Peter-street, Wesleyan	"	1817	20	..	136	20	64	83	146	
14	St. Anne's	St. Anne's .	1835	10	13	90	..	34	74	108	
15	Chapel-street	"	1824	16	..	181	19	90	110	200	
16	Grafton-street	"	1818	22	23	106	6	70	65	135	
17	Crown-street	"	1822	22	..	149	11	70	90	160	
18	Christian Benevolent Society	"	1813	10	..	104	..	64	40	104	
Total	263	169	2142	272	1217	1367	2584

TABLE XX.—continued.

No.	CHARITY SCHOOLS.	PARISHES.	Date of Establishment.	Number of Teachers.	AGE.			SEX.		Total Number of Scholars.
					Under 5 Years.	Between 5 and 15.	Above 15.	Boys.	Girls.	
DAY SCHOOLS.										
<i>Instruction Gratuitous to all.</i>										
1	St. Anne's	St. Anne's .	1859	2	..	150	..	100	50	150
2	St. George's National, Male	St. George's	1742	1	..	250	..	230	..	230
3	St. George's, Female		1818	1	..	120	..	..	120	120
4	St. George's, Out-ward, National, Male . . . . .	..	1742	1	..	150	..	150	..	150
5	St. George's, Out-ward, National, Female . . . . .	..	1814	1	..	90	..	..	90	90
6	Knightsbridge, National . . . . .	..	1781	2	..	70	..	49	21	70
7	Burlington	St. James's	1831		..	110	..	..	110	110
8	Offertory . . . . .	..	1771	1	..	80	..	80	..	80
9	St. James's, Sunday and Evening, Male . . . . .	..	1827	1	..	120	142	..	142	142
10	St. James's, Sunday and Evening, Female . . . . .	..	1827	1	..	40	40	..	80	80
	Total . . . . .	..	..	1	..	1072	170	771	471	1242
<i>Instruction Gratuitous to Part.</i>										
11	Archbishop Tenison's Grammar	St. James's	1702	1	..	58	..	58	..	58
DAY SCHOOLS.										
<i>Instruction not Gratuitous.</i>										
12	Christian Benevolent Society (b)	St. Anne's	1793	1	..	175	..	175	..	175
13	Charlotte-street Chapel	St. George's	1830	1	..	70	2	..	72	72
14	Scotch Church	St. James's	1833	1	50	63	1	30	86	116
15	Craven Chapel, Male (b) . . . . .	..	1827	1	..	236	..	236	..	236
16	St. James's, Female (b) . . . . .	..	..	1	..	160	..	..	160	160
17	St. James's National, Male . . . . .	..	..	1	..	221	..	221	..	221
18	St. James's, Female . . . . .	..	..	1	..	132	..	132	..	132
	Total of Day Schools, 18 . . . . .	..	..	7	50	1049	3	662	450	1102
INFANT SCHOOLS.										
<i>Instruction not Gratuitous.</i>										
1	St. James's	St. James's	1833	2	280	..	..	280	88	280
2	Craven Chapel (b) . . . . .	..	1836	1	93	12	..	63	42	105
3	St. Mark's	St. George's	1831	2	135	99	..	123	111	234
4	Farm-street . . . . .	..	..	2	63	90	..	74	79	163
5	St. Peter's . . . . .	..	1833	2	125	45	..	100	70	170
6	Mrs. Glynn's . . . . .	..	1829	1	31	7	..	20	18	38
	Total of Infant Schools, 6 . . . . .	..	..	10	727	253	..	580	408	980

(a) Of the Sunday schools, Nos. 1, 2, 8, 9, and 14 are connected with the Established Church; Nos. 4, 5, 6, 7, 10, 11, 15, and 17, with congregations of Independents; Nos. 12 and 18 with the Scotch Church; 3 and 13 with Wesleyan; and 16 with Baptist congregations.

(b) These schools are conducted upon the British and Foreign system.

TABLE XXI.—General Summary of Schools and Scholars in the three Parishes of St. George, St. James, and St. Anne Soho.

DESCRIPTION OF SCHOOLS.	Total of the three Parishes.		TOTAL OF DISTRICT.					
	Schools.	Scholars.	Age.			Sex.		Per Centage
			Under 5.	Between 5 and 15.	Above 15.	Male.	Female.	Of the Total Number of Sunday Scholars.
SUNDAY SCHOOLS								
Church of England	5	681	66	435	180	305	376	28·35
Protestant Dissenters	13	1903	103	1708	93	912	991	73·65
Total	18	2584	169 or 6·54 per cent.	2143 or 82·93 per cent.	273 or 10·53 per cent.	1217 or 47·10 per cent.	1367 or 52·90 per cent.	100· 24·74
Returned also as Day-scholars . . . . .	..	1636	..	..	..	..	..	63·31
Receiving Sunday School Tu- tion only . . . . .	..	948	62	786	100	464	522	36·69
DAY SCHOOLS.								
Dame Schools	46	759	379	380	..	380	379	..
Common Day Schools	55	1185	341	830	14	496	699	..
Middling ditto	55	1671	95	1541	35	882	789	..
Superior ditto	18	758	23	621	114	381	377	..
Supported solely by the Scholars	174	4373	838	3372	163	2129	2244	.. 49·43
Infant Schools assisted by the Public	6	980	687	293	..	580	400	..
Charity and Endowed Schools	18	2402	50	2179	173	1481	921	..
Supported or aided by Charity	24	3382	737	2472	173	2061	1321	.. 38·23
Evening Schools	13	106	3	83	20	48	58	..
Total Number of Schools and Scholars	229	8809	1650 or 18·56 per cent.	6713 or 76·24 per cent.	446 or 5·20 per cent.	4702 or 53·15 per cent.	4145 or 46·85 per cent.	.. 100·

TABLE XXII.—Shewing the causes of Children leaving the National School of St. George's, from July, 1826, to July, 1838, (12 Years).

[Taken from the Books of the School.]

	Boys.	Girls.
Left the Parish	241	100
Withdrawn	137	150
Got employment	311	68
Promoted to Endowed School	110	..
Left, being of full age	50	60
Withdrawn in bad health	3	3
Dead	9	9
Received at Workhouse	18	4
Absconded with their clothes	9	4
Expelled	7	1
Dismissed	100	48
Not to be found	6	4
Went to sea	1	..
Transferred from one Ward School to the other	18	11
Total	1020	62

TABLE XXIII.

Shewing the Occupations, and Illustrating the Class of Persons who send their Children to Charity Schools, distinguishing British and Foreign Schools from National and Infant Schools, distinguishing also the latter as Schools in London and Schools in the Suburbs.

TRADES and CALLINGS	National and Church of England Infant Schools.				British and Foreign.	
	In London.		In Suburbs.			
	Number.	Per-Centage.	Number.	Per-Centage.	Number.	Per-Centage.
Bricklayers & Stone-	77	3.59	64	4.63	23	2.80
Masons						
Carpenters	105	4.86	175	12.68	109	13.26
Charwomen	140	6.54	64	4.63	14	1.70
Jewellers & Gold-					32	3.90
smiths						
Labourers	138	6.44	336	24.34	16	1.95
Laundresses	79	3.65	77	5.58		
Mechanics	60	2.80	63	4.56	74	9.
Policemen	18	.84	43	3.21	24	3.
Porters	154	7.19	55	3.98	50	6.
Shoemakers	152	7.10	47	3.52	82	10.
Smiths	69	3.41	75	5.63	58	7.07
Servants & House-	292	13.64	77	5.57	24	2.92
keepers						
Sempstresses	38	1.73	15	1.08	16	2.
Stablemen, Ostlers,	535	25.	90	6.53	36	4.40
Cabmen, &c.						
Tailors	97	4.53	48	3.27	120	14.63
Widows & Mothers	26	1.21	11	.79	16	2.
only						
Apothecary	1					
Bakers	23		8		10	
Butchers	18		1		8	
Clerks & Pew-openers	11		9		6	
Chimney Sweeps	3		4		2	
Greengrocers	9		6		15	
Gardeners	2		24			
Hawkers & Street-	9	7.47	2	10.	12	15.37
Venders						
Hairdressers	5		9		7	
Horse-Dealer					1	
Letter-Carriers	2		2		2	
Pensioners & Paupers	2		9			
Painters, &c.	33		34		17	
Saddlers	33		12		7	
Soldiers & Sailors	6		16			
Shopmen	3		4		39	
	2140	100.	1380	100.	820	100.

Note.—The National schools referred to in this Table are the five National schools in St. George's parish, two of which are situated in South-street, Grosvener-square, two in Belgrave-street, Belgrave-square, and one at Knightsbridge. The Infant schools are those of St. Mark's, and Farm-street, both situated near Grosvener-square. The British and Foreign school is situated in Ship-yard, Wardour-street, Soho.

TABLE XXIV.—*Shewing the Number of Houses Inhabited by Poor Families in the Parishes of St. George, St. James, and St. Anne Soho, with the District of the City Mission in which they are Situated.*

BOUNDARIES OF DISTRICTS.					
No. of Houses.	Districts of City Mission.	North Boundary.	East Boundary.	South Boundary.	West Boundary.
268	Park-street	Oxford-street	Davies-street	Mount-street	Hyde-park.
237	Staghope-street	Mount-st. & Bruton-pl. . . .	Old Bond-street	Piccadilly	" "
291	Manover-square	Oxford-street	Regent-street	" "	Bond-street & Davies-st.
415	Carnaby-market	" "	Poland-st. & Windmill-st. . . .	" "	Regent-street.
427	Barwick-street	" "	Wardour-street	Coventry-street	Poland-st. & Windmill-st.
323	Soho-square	" "	High-street, St. Giles	Compton-street	Wardour-street.
229	Leicester-square	Compton-street	{ Great St. Andrew's-st., & St. Martin's-lane . . . }	Charing-cross	{ Prince's-st. & Whitcumber- street.
369	St. James's-square	Piccadilly	{ Cockspur-st. & Charing- cross }	St. James's-park	Green-park.
221	Belgrave-square	Knightbridge	Wilton-pl. & Belgrave-st. . . .	Colehill-st. & Ebury-st. . . .	Sloane-street.
183	Lock Hospital	Knightbridge-road	Grosvenor-place	Ranelagh-street	Wilton-pl. & Belgrave-st.
359	Chelsea-road	Arabella-row	Chelsea-road	Queen-street	Ebury-street.
224	Chelsea Hospital	Grosvenor-row & Queen-st. . . .	Turpentine-walk	The Thames	Paradise-row.
157	Gillingham-street	Shaftesbury-terrace	Vauxhall-road	Willow-walk,	Chelsea-rd. & Belgr-rd.
81	Millbank	Chelsea-road	Belgrave-road	Thames	Turpentine-walk.
207	Vauxhall-road	Vauxhall Bridge-road	Thames	Belgrave-road	Willow-walk.
2691					

APPENDIX.

Account of the several Schools supported wholly, or in part, by Charity in the three Parishes of St. George, St. James, and St. Anne Soho.

I. *St. George's United Day-Schools of Industry and Instruction*, Nos. 2, 3, 4, and 5.*—These schools, which originated in an endowment of the late Right Honourable General Stuart, became a National school in 1818, and was then divided into two schools, one of which is situated in South-street, Grosvenor-square, and the other in Belgrave-street, Belgrave-square. Each of these portions of the original school consists of a boys' school and a girls' school, conducted on the National system, and superintended by one master and one mistress; works of industry form an essential part of the routine of the school business. Plain needle-work is executed by the girls; a certain number of boys are instructed as tailors, who make all the clothes for the boys in the school. The boys' school in South-street contains 250 children, all of whom, except the younger portion of them, are clothed by General Stuart's endowment. The female school consists of 120, all of whom are clothed. The school in Belgrave-street contains 150 boys, and 90 girls, who are clothed in like manner.

Besides General Stuart's legacy, there are annual subscriptions and collections after sermons, which, together with the proceeds of the children's work, form the income; they are under the management of the trustees of General Stuart's charity, and a board of managers elected by the subscribers.

In the body of the Report, these are mentioned as being the first in point of discipline and cleanliness of the Day-schools which your Committee have seen. They are strictly connected with the Established Church, and the rector of St. George's parish (being a subscriber) is, *ex officio*, vice-president.

II. *Knightsbridge National School for Boys and Girls*, No. 6.—This school was established in 1821, in connection with Trinity Chapel, Knightsbridge, close to which it is situated. It is conducted on the National system, by one master and one mistress, who have 65*l.* per annum, with a house, &c. It is supported entirely by voluntary subscriptions, and contains at present 49 boys, and 21 girls.

III. *The Burlington Charity School for Girls*, No. 7.—This school, which is in connection with the Established Church, was originally instituted in 1699 for instructing 60 poor girls, whose parents could not afford them any education, in reading and writing, and in the knowledge of the Christian religion. The increase of subscribers, and consequent increase of funds, have enabled the trustees, from time to time, to augment the number of children to 110, which is the number now in the school. The trustees resolved in 1834 to admit children from 8 to 10 years of age, and to keep them until 15, giving the preference, first, to children of poor housekeepers having a legal settlement in the parish: secondly, children of lodgers having a legal settlement in the parish: thirdly, children of poor housekeepers, who, not having a legal settlement in the parish, have paid rates and taxes during a certain time: fourthly, children of lodgers who, not having a legal settlement in the parish, have

*The figures refer to the Numbers in Table No. XX.

paid rates and taxes during a certain time. Each child must be recommended by a subscriber, and is admitted, provided she is able to say the Creed, Lord's prayer, and ten Commandments,—was baptized in her infancy, and is free from disorder and infirmity.

When she is sent to service, clothes are given to her, and if she has behaved well whilst in school, and brings a good character after one year's service, she receives a Bible and 1*l.*, and if she continues to behave well, receives another 1*l.* at the end of the second year.

The number of girls educated at this school, from 1699 to 1725, were 350; and from 1725 to the present time, there have been *wholly maintained* 1859.

This Charity possesses a large and spacious building, one of the best of its kind in this part of London. The school is conducted by a matron and schoolmistress, one of the parents of whom was brought up in this school, under the direction of the Rev. G. T. Andrewes, who takes great interest in the well-being of the school, and conducts it on his own system.

IV. *Archbishop Tenison's Grammar School*, No. 11.—This school was founded in 1702 by Archbishop Tenison, formerly rector of this parish, and is supported by a share of the pew-rents of the chapel in Regent-street, which bears his name.

The foundation scholars are admitted (on the nomination of a trustee) at 9 years of age, are kept in the school 5 years, and are then assisted in procuring an apprenticeship. 40 boys are educated gratis, but they have no clothing or other advantage. 18 more are taken in by the master as oppidans; they are taught reading, writing, and arithmetic: the whole school has an appearance of something between that of a National and a good Middling Day-school under one master. The school-room is a lofty, spacious, well-ventilated chamber, and the whole building being new and well planned, has a good and comfortable appearance.

V. *The Offertory School*, No. 8.—This school, containing 80 boys, is supported by part of the collections at the sacrament in the church and chapels in St. James's parish, and is of course in strict connection with the National church, which the children attend as a body every morning in the week. Children are admitted from 7 to 10 years of age, and are instructed and clothed in a parochial school uniform until the age of 14. Assistance is also given towards apprenticing the most deserving boys. They must have been baptized in infancy, and preference is given when the baptism has taken place at the parish church. This school is carried on in a new building, not so spacious nor so well situated as those of the Burlington and Archbishop Tenison's schools, but well ventilated and suited for its purpose.

VI. *St. James's National Schools*, Nos. 17 and 18.—These schools were instituted in 1827, and are supported by voluntary donations and subscriptions; they are open to all children between the ages of 7 and 14, on payment of 1*d.* per week each; the present number of scholars is 221 boys, and 132 girls, who are taught on the National system of mutual instruction.

By way of reward, the first classes and monitors are also taught Scripture Geography, in explanation of the New Testament. The boys are also instructed in the History of England, the outlines of Geo-

graphy by the help of large maps, and how to apply the tables of weights and measures for the purposes of trade.

The schools are constantly visited and inspected by the parochial clergy, besides the public examinations in May or June, and November. Every boy who has been at this school for 3 years, and leaves it, having completed the 12th year of his age with a good character, is entitled to a Bible and a half-sovereign on bringing a good character from the master whom he has served for 12 months complete, which rule also applies to the girls.

There is a provident institution in these schools, in which weekly payments of 1*d.* and upwards, are received from the children every Monday. These payments are returned after 3 months. When they amount to 6*s.*, 6*s.* 6*d.* is paid in money, or 7*s.* in useful clothing. There is also a system of fines adopted in these schools; they never exceed 3*d.* in amount, and are imposed at the discretion of the visitor.

VII. *St. James's Sunday and Evening Schools*, Nos. 9 and 10.—These Sunday and Evening schools are intended chiefly for young persons of 12 years old and upwards, who have passed through the above schools, or who, being engaged during the week in service, or instructed at that time in private establishments, are desirous of improving in religious knowledge, and spending the best part of the Lord's day in the service of God. No payment is received for their instruction. The boys meet every Sunday at the chapel in Berwick-street, and the girls in the school-room adjoining Archbishop Tenison's chapel; both at half-past 9 precisely. Those who are regular in attendance on the Lord's day, are admitted to receive instruction, in writing and other subjects, every Monday and Thursday evening, at the National school-rooms, if their parents desire it.

VIII. *Craven-street Chapel Schools*, Nos. 15 and 16.—These schools are conducted on the British and Foreign system, under Craven chapel, in dark and by no means commodious apartments. They contain at present 226 boys and 160 girls, who pay 2*d.* per week each, and an additional penny for writing. These payments, together with subscriptions and congregational collections in Craven chapel, form the support of the school. Judging from the number of entrances which take place in each year, the children in these schools must fluctuate as much as in a Common Day school, and consequently there can be little room for that moral improvement which is the object of a charity school. Nevertheless, the discipline is great, and, as in most British and Foreign schools, the children seem to enter with energy into the business of their own education. Although these schools belong to the Independent chapel, and are supported by subscriptions and collections from their congregation, they are not confined to children of parents belonging to any particular religious persuasion. It is probable, however, that the greater part of them are the children of persons who attend the chapel. There is a lending library attached to these schools, or at least to the Sunday school of the same congregation.

IX. *The Scotch Church School*, No. 14.—This school was founded in 1833, in connection with the Scotch Presbyterians, and is supported by public subscriptions and by collections in the Scotch church, Swallow-street, once a year.

The building in Swallow-street in which it is held, is very small and low, but it is better adapted to the purpose, and is much more cheerful and better lighted than the school-rooms under Craven chapel. The total number of children at present is 116; they are young, and the greater portion of them are girls.

X. *St. Anne's Parochial School*, No. 1.—This school was founded in 1699. It is supported by voluntary contributions, which have been allowed to accumulate, and by an endowment. The house in which it is established is a commodious building, containing apartments for the master and mistress, and shut out from the street by a court, in the manner of a hospital or college. It contains 100 boys and 50 girls, of whom the greater part are clothed in a charity costume; the boys' similar to those of St. George's, Hanover-square, and the girls' one of the neatest, though most decided, of its kind in London. The children are taught on the usual National-school system, and in so far, it may be called a National school, but the instruction is entirely gratuitous. This is on the whole a very good school, considering the poor and low neighbourhood in which it is situated, and is equal in neatness and order to the South-street National school.

XI. *Christian Benevolent Society's School, Ship-yard*, No. 12.—This school was founded in 1793, and re-commenced in 1831. It is supported entirely by voluntary contributions, and is conducted on the British and Foreign system. There are at present 175 boys, who are admitted without any limitations as to sect, although the subscribers are, for the most part, Presbyterians. The children pay 3d. per week each, and receive no clothing or other advantages. The school-room is spacious and airy, and very different in appearance from those of endowed schools.

INFANT SCHOOLS.

I. *St. Mark's*, No. 3.—This school was founded in the year 1831, and is supported entirely by voluntary subscriptions. It is held in a very spacious and airy building at the back of St. Mark's church; there is a large court-yard, in which the children play, and, during summer, carry on their school business. The whole premises are separated from the street by a long archway, and the advantage of this retirement and freedom from disturbance is very beneficial. It contains at present 234 scholars, who are taught strictly on Mr. Wilderspin's system, by a master and mistress, the latter occasionally taking the elder children into another room for needle-work.

This school has a savings' bank for the elder children; 50 money-boxes are provided, in which they put their savings, from 1d. to 6d. per week. Some of the children have had as much as 8s. or 10s. at once, and it is calculated that at the present time there are from 50s. to 60s. in the boxes; the money is given to them when they require any article of clothing, and occasionally something is added by the Sunday-school teachers. There is also a fund upon the same principle for the purchase of books, to which at this time 38 children and 11 parents are contributors.

The following is a statement of the books thus purchased during the last half-year, from the 1st March to 1st September, 1838:—

	s.	d.
96 Prayer Books	at 0	6 each.
15 Prayer Books	1	6
17 Prayer Books	2	0
11 Testaments	2	0
18 Bibles	2	6
9 Bibles	3	0
13 Bibles	4	0

Total . 179

The beneficial effect of these funds has been shewn in the body of the Report.

The children generally go from this school to St. George's National school; one is in a great measure a nursery for the other, and in some degree managed by the same visitors, both belonging strictly to the Established Church.

II. *St. Peter's Infant School*, No. 5.—This school bears the same relation to the Belgrave National school which St. Mark's does to St. George's school in South-street, but is not on so extensive a scale.

III. *Infant School, Ranelagh-row, Milbank*, No. 6.—This is usually called Mrs. Glynne's school, having been instituted, and being still chiefly supported, by that lady. It is held under a small Wesleyan chapel, in a room of sufficient size, but too low and dark for the purpose.

The situation, however, of the school on the bank of the Thames, and in a retired country spot, gives it a more cheerful appearance than it would otherwise have. It contains 38 infants, who are the children of a small village congregation round a factory on that spot. It is conducted by one mistress, and receives children of all denominations, although, as is the case of most schools which are held under a chapel, the majority of the children are those of the congregation.

IV. *Farm-street Infant School*, No. 4.—This school is supported entirely by voluntary subscriptions, and is attached to no particular place of worship, though the master for many years past has been a Dissenter, and the school is chiefly attended by the children of Dissenters. The school is conducted on Mr. Wilderspin's system. The building is small, though, having been built on purpose for an infant school, it is commodious and well-ventilated; it contains at present 153 children.

V. *St. James's Infant School*, No. 1.—This school is in immediate connection with the St. James's National, and the St. James's Sunday and Evening schools. The scholars are taught on the usual plan by means of lessons, songs, cards, prints, bead-tables, &c.; and those who are most forward, are formed at times into separate classes, and instructed by themselves: one child of a family is required to pay 2d. a week for instruction, two children 3d., and three 4d. On Sunday there is no attendance. The children are admitted at 2 years of age, and are promoted to the National schools at 7 or 8, according to the wishes of their parents, or the number of names on the register. This school forms part of the general system of Benevolent Institutions in St. James's parish, and is presumed to enjoy the advantages of its lending library, &c.

It is proposed that when the district church in Berwick-street is completed, there shall be another Evening school for the children in the eastern part of the parish, and a third in Swallow-street for the children of the southern.

VI. *Craven Chapel Infant School*, No. 2.—This school is in connection

with the Charity schools of Craven chapel (*see* No. VIII., page 473), and is held in a similar apartment under the chapel, by no means airy, or well lighted. The children attending it belong to the same class as those in the two Charity schools before-mentioned. It is supported out of the same funds with them, and is a part of the Craven congregation system, in the same manner as the preceding Infant school, No. 5, is a part of the general Benevolent Institutions of St. James's parish.

SUNDAY SCHOOLS.

St. Mark's Sunday school, George-street.—This school is attached to the District chapel of St. Mark's, and to the Infant school of the same name, in the building belonging to which it is held. It was founded in 1831, is under the superintendence and management of the clergyman of St. Mark's, and of course belongs to the Established Church, though all children are received who are willing to conform to the regulations of the school, and to attend Divine Service. At present it has 12 teachers, and 158 scholars, of whom 130 form the average attendance.

Charlotte-street Chapel Sunday school.—Is attached to the chapel of that name, and is in connection with the Church of England. It is held under the same roof as the chapel and as the Girls' Day school, but in a separate room appropriated and fitted up for the purpose. It is entirely under the superintendence of the Rev. Dr. Dillon, the minister of the chapel. It was founded in 1831, and contains at present 193 scholars, of whom 72 attend Day schools also.

Ranelagh-road Sunday school.—Was founded in the year 1827, and now contains 50 scholars, of whom 40 form the average attendance. They are instructed by 6 teachers. The school is held in the room under the Wesleyan chapel, which bears the same name, and with which it is connected; but it admits children of all denominations.

Gillingham-street Sunday school.—Was founded in 1836, is supported by private subscription, and consists at present of 11 teachers, with 120 scholars, of whom 90 are said to attend Day schools also; and 100 form the average attendance. It is in connection with the Independent congregation of the chapel bearing the same name.

Shepherd's-market Sunday school.—This school was founded in 1816, and is supported by private subscription. It contains at present 12 teachers and 110 scholars, of whom 90 form the average attendance. It is in connection with the Independent congregation of the chapel, in the vestry of which it is held.

Robert-street Sunday school.—This school was founded in 1818, and is supported by public subscription. It consists at present of 20 teachers, and 240 scholars, of whom about 170 form the average attendance. It could not be ascertained how many of these were attending Day schools also. It is in connection with the Robert-street Independent chapel, but receives children of all denominations.

Oxford-buildings Sunday school.—This school was founded in 1833, is connected with a congregation of Independents, and consists at present of 6 teachers and 80 scholars. 70 of the latter are said to attend Day schools also, and 40 form the average attendance.

St. James's Sunday and Evening schools.—These schools, one for boys and one for girls, were founded in 1827. They are connected with

the Established Church, and are under the same superintendence as the National and Infant schools of the parish. The purpose for which they are instituted is to give young persons who have left the National schools, or who are engaged during the week-days in their various occupations, an opportunity of acquiring religious instruction.

Those who attend them are permitted also to attend the Evening schools twice in the week gratuitously. When the Berwick-street chapel is completed, they will be accommodated in rooms appropriated to them.

Craven Chapel Sunday schools.—These schools, one for boys and one for girls, were founded in 1825, in connection with Craven Independent chapel, of the general system of which they form a part. They are supported by congregational collections in that chapel, and by private subscription. They are held in the rooms under the chapel, which are sufficiently spacious in point of area, but are very low and dark.

Scotch Church Sunday school.—This school was founded in the year 1808, in connection with the Scotch Church, Swallow-street. It is held in the same room as the Day schools, somewhat differently arranged. It consists now of 14 teachers and 181 scholars; out of which 120 form the average attendance, and 150 are said to attend Day schools also.

Peter-street Sunday school.—This school was founded in 1817, and is in connection with the Wesleyan chapel, in the body of which it is but indifferently accommodated. It contains at present 146 scholars; 75 of whom form the average attendance, and 40 are said to attend Day schools also.

St. Anne's Sunday school.—This school was founded in 1835, in connection with the Established Church, being the Sunday school of St. Anne's parish. It contains at present 10 teachers and 108 scholars, 80 of whom form the average attendance. The number who attend Day schools also, could not be ascertained. It is supported by collections in the parish church.

Crown-street Chapel Sunday school.—This school was founded in 1823, and consists at present of 22 teachers, and 160 scholars; 78 of whom form the average attendance, and 40 are said to attend Day schools also. It is supported by public subscriptions, and belongs to the Independent congregation.

Grafton-street Sunday school.—This school was founded in the year 1818, in connection with the Baptist congregation of the above chapel. It has a lending library and a clothing fund attached to it, and consists of 22 teachers and 135 scholars, 110 of whom are said to form the average attendance.

Chapel-street Sunday school.—This school was founded in the year 1824, in connection with the Independent congregation of the chapel. It has a lending library and a benefit society attached to it, and contains 16 teachers and 200 scholars, of whom 130 form the average attendance.

Christian Benevolent Society's Sunday school, Ship-yard, Wardour-street, Soho.—This school was founded in 1813, in connection with the above society. It consists at present of 10 teachers and 104 scholars, 50 of whom form the average attendance; 64 (12 boys and 52 girls) are said to attend Day schools likewise. The room in which it is held is the same as that in which the British and Foreign Day school is held, which is spacious and well ventilated.

Moral Statistics of the Parishes of St. James, St. George, and St. Anne Soho, in the City of Westminster. Supplementary to the Third Report of the Education Committee of the Statistical Society of London. By the Rev. EDGELL WYATT EDGELL, Fellow, and Member of the Education Committee, of the Statistical Society of London.

[Read before the Statistical Society of London, on Monday, 19th of November, 1838.]

HAVING had occasion, as a Member of the Education Committee of the Statistical Society, to turn my attention to the condition of the children of the poor in the three parishes of St. James, St. George, and St. Anne Soho—a Report upon the schools of which has just been laid before the Society—I have been led to consider, and to collect such information as I could obtain respecting the state of the parents of those children, and the general religious and moral condition of the poor population of the district.

Such information collected by an individual, must necessarily be very imperfect. A complete investigation into so extensive a subject, would require means and exertions beyond those which any individual could bestow, and therefore belongs rather to a body like the Statistical Society. It is, indeed, a matter for congratulation, that the Council of this Society has determined forthwith to commence the enquiry into some parts of London—perhaps into these very parishes. If such should be the determination of the Committee entrusted with the task, I hope that the following information will tend somewhat to abridge their labours; at all events, it will serve to throw additional light upon the moral statistics of the district, one branch of which forms the subject of the Report which has just been read.

As the following statements apply exactly to the same part of Westminster which has been described in the preceding Report on Schools, it will not be necessary to repeat what has been said concerning its area, boundaries, population, &c., further than that the parish of St. Anne Soho, contains a poor population, consisting of workmen, employed by masters in a number of different trades, too various to come under any classification (as may be seen by the registers of the children's parents in the British and Foreign schools in that parish.)* The parish of St. James, on the contrary, contains a population in one respect resembling that of a manufacturing town. The tailors and shoemakers have there their houses of call, their societies and clubs; and form a large, and in their own class of life an influential, body. Either there are few of them in St. George's parish, or they send their children to a better class of schools, since comparatively few tailors' children attend St. George's Charity schools or Dame schools. The poor population of this last parish, at least of that portion of it lying between Regent-street and Park-lane, consists in a very large degree of grooms, ostlers, and others connected with stables (as will be seen by the number of children of these people attending the In-Ward schools.)† The poor population of the Out-Ward of St. George's parish, by which is meant the portion between Grosvenor-place and the River, consists of carpenters, bricklayers' labourers and others, who have become located there on account of the buildings which have now for a long time been carried on in those parts.

* See Education Report, Table, No. XXIII.

† Ibid.

I.—Of Religion, Places of Worship, &c.

The state of the population, as far as external observances of religion are concerned, will be illustrated in some degree by the following tables.

Table shewing the Number of Churches and other Places of Worship in the three Parishes of St. George, St. James, and St. Anne Soho; together with the Number of Services, and the Number of Persons they will respectively contain.

Religious Persuasion.	Name of Church.	Locality.	Services on Sundays.		Services on Weekdays.		Space in Church.	Members of Dissenting Churches.
			D.	E.	D.	E.		
Church of England	St. George's Church.	Hanover-square . . .	2	1	6	.	1500	..
	St. James's* "	Piccadilly . . .	2	1	11	.	1700	..
	St. Ann's "	Soho . . .	2	1	2	.	14.0	..
	St. Mark's Dist. Ch..	North Audley-street	2	2	.	.	1450	..
	St. Peter's "	Belgrave-square . .	2	2	.	.	1800	..
	Hanover "	Regent-street . . .	2	2	1	.	1500	..
	Grosvenor "	South Audley-street	2	2	.	.	950	..
	Trinity Chapel "	Knightsbridge . . .	2	2	.	.	500	..
	Belgrave "	Halkin-street . . .	1	1	.	.	1000	..
	Eaton "	Near Eaton-square	1	1	.	1	800	..
	St. George's "	Albemarle-street . .	1	1	.	.	1000	..
	Lock "	Grosvenor-place . .	1	1	.	.	1000	..
	Charlotte-st. "	Pimlico . . .	2	.	.	1	1000	..
	Curzon "	Curzon-st. . . .	2	.	.	.	1200	..
	St. Mary's "	Park-street . . .	2	.	.	.	1400	..
	Trinity "	Conduit-street . . .	2	1	.	1	800	..
	Berkeley "	John-street . . .	2	.	.	.	1000	..
	Arch Tenison's Chapel	Regent-street . . .	1	1	.	.	950	..
	St. Philip's "	Waterloo-place . . .	2	.	.	.	1500	..
	York "	York-street . . .	2	.	.	.	600	..
	Berwick-st. [building]	. . .	.	.	.	.	1545	..
							24,645	
Scotch Church .	Scotch Church . .	Swallow-street . . .	1	1	.	1	600	800
French Protestant.	A Chapel . . .	Edward-street . . .	2	.	.	.	200	..
	Le Quarré . . .	Dean-street . . .	1	.	.	.	150	..
Wesleyan . . .	A Chapel . . .	Peter-street . . .	2	1	.	2	400	150
	A Chapel . . .	Ranelagh-road . . .	1	1	.	1	1:0	..
Bible Christian .	A Chapel . . .	St. George's-place .	2	1	.	4	40	..
Independent . .	A Chapel . . .	Robert-street . . .	3	1	.	.	770	400
	A Chapel . . .	Crown-street, Soho	4	1	.	1	900	500
	Craven Chapel . .	Marshall-street . .	3	.	.	2†	2300	860
	A Chapel . . .	Shepherd's Market	2	1	.	2	500	200
	A Chapel . . .	Little Chapel-st., Soho	3	1	.	2	900	250
Baptist . . .	A Chapel . . .	Grafton-street . . .	3	1	.	2	500	..
	Carmel Chapel . .	Westbourne-street .	4	1	.	2	400	140
	Salem " . . .	Mead's-court . . .	4	1	.	2	600	450
	Soho Chapel . . .	Oxford-street . . .	3	1	.	2	500	250
Roman Catholic .	St. Patrick's Chapel	Soho . . .	2	.	6	.	850	..
	Warwick " . . .	Warwick-street . .	2	1	6	.	700	..
Jewish . . .	Synagogue . . .	St. Alban's-place . .	2‡	.	6	6	470	..
							10,930	

* Services are also held at the Workhouse of St. James's parish, and at the National School-rooms of the same parish.

† One of these services, termed the "Young Men's Prayer-meeting," is a very interesting one. It is usually attended by from 60 to 80 young men under 30 years of age, of the class of tradesmen. There is another in Crown-street.

‡ In the case of the Synagogue, this column applies to the Jewish Sabbath.

The first and second columns of the foregoing Table shew the denominations of Christians and the names of the respective churches.

The third shews the locality.

The fourth and fifth, with their divisions and subdivisions, shew the number of services on Sundays and week-days, dividing these into such as are held in the morning, and such as are held, during the greater part of the year at least, after dark. By "Services" is to be understood the opening of the doors for religious worship, without making any distinction as to the particular nature of them. Prayer-meetings are included; and in the Catholic chapels the masses which take place at consecutive hours are considered as one service, inasmuch as the doors are not closed between each, and a portion of the congregation remains from one to the other.

The sixth column shews the number of persons the respective churches will contain, or as it is usually called, the number of "sittings."

The last shews the number of members attached to each dissenting church.

With respect to the ministers who attend to the duties of these several churches and chapels, so many columns would be required to describe them correctly, that all mention of them has been omitted in the table. It may here, however, be stated:—

1. That the parish and district churches have 15 clergymen, to whom parochial charge is, in the strictest sense of the word, entrusted, and who, being constantly in the district, have no duties out of it. Besides these there are 24 clergymen, who are, in different ways more or less connected with, or concerned in, the Church which is within these limits: though most of them have no parochial charge, and some are not always resident.

2. Eight Protestant dissenting chapels have one minister attached to each, without other charge than the care of his own congregation; five more are supplied by occasional ministers.

3. One French Protestant chapel has two clergymen; the other has one.

4. One Roman Catholic chapel has three priests in constant attendance upon it; the other has four.

The number of sittings in the Established Church (amounting to 24,645) is under one-fourth; and the number of sittings in other places of worship (amounting to 10,930) is about one-tenth of the whole resident population of the district.

At Sunday morning services, all these are occupied, in the case of the Established Church (during greater part of the year at least). And as such congregations consist of the gentry and their dependants, this circumstance of their thus filling the churches proves that one duty at least is well attended to by this portion of the community.

It will appear from the tables, that what other sects want in space, they make up in the frequency of their services: indeed some chapels have religious worship going on almost without intermission, from 7 of the Sunday morning till 9 at night. The week-day morning services, which are found in the columns only against the parochial churches and Roman Catholic chapels, are by no means so well attended in the former

as in the latter, where 100 persons on an average are to be seen at their devotions* every morning, during or between the masses. As to the week-day evening services, which are found in the column opposite to the Proprietary and Dissenting chapels, they are generally attended by 150 persons at the least, generally by more.

II.—Of Prayer Meetings, and Temperance Societies' Meetings.

In one point of view these may be of less importance than the services in places of public worship before-mentioned; but in another they are more interesting, inasmuch as they shew what the lower orders are disposed to do for themselves. These two kinds of meeting, although not exactly similar, and, indeed, in the opinion of some persons, founded on opposite principles, may, nevertheless, be classed together in the following table: for all the Temperance Societies' meetings begin with prayer; and constant allusion to religious motives was made in the speeches of those who addressed the meetings at which the writer of this article was present.

<i>Prayer Meetings.</i>		
Places of Meetings.†	Number in the Week.	Remarks.
Brown-street, Grosvenor-square . . .	1	. .
Avery-row, Bond-street	1	. .
School-room, Shepherd's-market . . .	1	. .
New-street, Golden-square	1	. .
School-room, Ship-yard	1	. .
School-room, Gillingham-street . . .	2	. .
Total	7	
<i>Temperance Societies' Meetings.‡</i>		
Westbourne-street	2	. .
School-rooms, Robert-street	1	. .
„ Oxford Buildings	1	In each alternate week.
„ Ship-yard	1	Lately commenced.
„ Farm-street	1	. .
Bible Christians' Chapel, St. George's-pl.	1	. .
Total	7	

The Prayer Meetings are held in private houses of that class in

* The Roman Catholics have as much the advantage in their demeanour as in their attendance at prayer. The members of the Church of England sit during prayer; the Dissenters generally stand; the Roman Catholics kneel, or use the posture to which they are invited by the words of their liturgic hymn:—"Tantum ergo sacramentum veneremur cernui."

† In Hind-street, just out of St. George's parish, two meetings in the week are held at 6 o'clock in the morning, which are said to be well attended.

‡ Close to St. George's parish, in Chelsea parish, is held a Roman Catholic Temperance meeting. The reason assigned for their not joining the Protestants in Temperance meetings being "the danger of conversion."

which the Dame and Common Day schools are usually found. The street-door is left open, and a lighted candle is placed upon the stairs to invite passers-by to enter: and it is said that this simple contrivance often has the desired effect. Be this as it may, they are generally attended by from 10 to 20 persons; of whom the larger portion were, in the instances witnessed, young and middle-aged men. The frequent change of locality, and the indifference with which the subject is treated by those who do not take an immediate interest in it, render it difficult to ascertain precisely the number in existence, which very likely exceeds the number given in the table.*

The Temperance Societies' meetings are held in buildings constructed for the purpose, and sometimes in small dissenting chapels, but more often in school-rooms. The attendance is always large, consisting of bricklayers' labourers, and people who sell things in the streets; not however without a mixture of respectable persons in a higher rank of life. The meeting is opened by a chairman sent from the Central Society, and the subsequent speakers are sometimes persons of the lowest class, who, however, speak by no means badly in their way. At the conclusion of the meetings a number of persons, perhaps on a rough average 5 per cent. of the whole number present, enrol their names on the Society's books kept there for that purpose.

III.—*Habits of Prayer amongst Children.*

A better insight into the religious feelings of the poor than can be obtained from either of the above enquiries, would result from an investigation into the number of children who are brought up by their parents with the habit of saying their prayers.

The following table rests partly on the authority of a schoolmaster who has kindly taken an interest in the subject, and partly on the personal investigation of the writer at several different schools. Class I. contains the number of children, who, when requested to repeat the prayers which they said every night on retiring to rest, repeated fluently, and in a manner which shewed that they were habituated to it, one prayer or more, of a kind which it is reasonable to suppose must have been learnt from their parents at home. Some included in this class, repeated the prayer so general in country villages, "Matthew, Mark, Luke, and John," with various alterations and additions, others some little hymn, or some prayer including the names of members of their family. Class II. contains the number of children who repeated prayers in a manner which shewed that they were habituated to say them; but prayers taken from the church service or used in the school which they attended, and therefore in a great measure shewing that the practice had originated with the child and not with the parents. Class III. contains the number of children who answered that they said their prayers; but, with respect to whom, it was pretty evident, from their manner and hesitation, that they did not. Class IV. gives the number of those who answered decidedly in the negative, or rather did not apprehend the meaning of the question.

* None which are held in places of worship are here mentioned, being included under the head of Services, in the previous table.

	No.	Per-Centage Proportion.
Class 1 . .	21	15·22
„ 2 . .	60	43·48
„ 3 . .	36	26·08
„ 4 . .	21	15·22
Total . .	138	100·

IV.—Benefit and Friendly Societies.

The following is the list of these institutions given in the Parliamentary Return of 1837, which are for the purpose of providing against sickness and misfortune, and very generally also for providing the means for the burial expenses of the members and their families. The list shews also the date of their establishment, and the places at which they are held. They are in number 40 :—

List of Friendly Societies in the Parishes of St. George, St. James, and St. Anne Soho, in the Year 1837, distinguishing those for Females from those for Men; and, among the latter, those for particular Classes from those which are general.

Names.	Places where Established.	Date of Enrolment.
FRIENDLY SOCIETIES FOR FEMALES.		
Sisters of Humanity . .	The Craven Arms, Marshal-st., Carnaby-market.	18 October, 1831.
United Sisters . . .	The Craven Arms, Marshal-st., Carnaby-market.	15 October, 1833.
FRIENDLY SOCIETIES FOR PARTICULAR CLASSES OF MEN.		
Western Benefit Society of Saddlers, Harness-Makers, &c.	The Vernon's Head Tavern, No. 32, North Audley-street.	1 October, 1829.
Upholsterers' Friendly Benefit Society.	The King's Arms, Poland-street, Oxford-street.	3 January, 1831.
Operative Masons . .	The George, Great Chapel-st., Soho.	4 July, 1831.
The Tailors' Benevolent Institution or Benefit Society.	The White Horse, West-row, Carnaby-market.	18 October, 1831.
Wind Musical Instrument Makers' Burial Society.	The Cock, Grafton-street, Soho	2 April, 1832.
Friendly Society of Gentlemen's Servants.	The Old Chesterfield Arms, Shepherd's-market.	19 April, 1832.
The Occidental Benefit Society of Painters.	The Harley Mow, Park-street .	16 October, 1832.
The Friendly Carpenters and Joiners.	The Running Horse, Duke-st., Grosvenor-square.	6 April, 1835.
The Hope Benefit Society of Painters & Glaziers.	Coach and Horses, Great Marlborough-street.	4 April, 1836.
GENERAL FRIENDLY SOCIETIES.		
The Good Samaritans . .	The Britannia, Berwick-street, Oxford-street.	28 January, 1830.
United Friendly Society .	Golden Lion, Wardour-st., Soho	13 April, 1830.
Social Friends . . .	The Berkeley Arms, John-st., Berkeley-square.	26 October, 1830.
Union Society . . .	Oliver's Mount, Mount-row, Berkeley-square.	Ditto.

Names.	Places where Established.	Date of Enrolment.
GENERAL FRIENDLY SOCIETIES—(<i>continued</i>).		
Oxford Good Intent . . .	The Crown, Crown-st., Princes-street, Soho.	3 January, 1831.
United Britons . . .	Oliver's Mount, Mount-row, Davis'-street, Berkeley-sq.	20 January, 1831.
The Safety . . .	Mills's Coffee-house, Gerrard-street, Soho.	4 April, 1831.
Sons of Briton . . .	The Green Man, Berwick-st.	Ditto.
Western Union . . .	The Cock, Grafton-st., Soho .	Ditto.
Sons of Humanity . . .	The Prince of Wales's Feathers, Grosvenor-place, Pimlico.	Ditto.
Friendly Benefit Society	The George, Grafton-street, Westminster.	27 June, 1831.
Associated Britons . .	Queen's Head, Queen's Head-court, St. James's.	28 July, 1831.
Free-Born Britons . .	Albemarle Arms, South-street	18 October, 1831.
Loyal Rodneys . . .	The Albion, Duke-street, Grosvenor-square.	2 January, 1832.
St. James's Union . .	The Grapes, Up. St. Martin's-ls.	Ditto.
Ancient Union Society .	The Phoenix, Stacey-st., Soho .	19 January, 1832.
The Sovereign . . .	The Three Doves, Berwick-st., Soho.	2 April, 1832.
The Abercrombie Society	The Barley Mow, Park-street, Grosvenor-square.	Ditto.
Friendly Brethren . .	The Albion, Duke-street, Grosvenor square.	Ditto.
Amicable Society . .	The George, Wardour-st., Soho	Ditto.
The Protector . . .	The White Horse, Rupert-street	9 May, 1832.
Ancient Britons . . .	The Grosvenor Arms, Belgrave-place.	Ditto.
True Britons . . .	The Old Chesterfield Arms, Shepherd's-market, May-fair.	10 July, 1832.
Oxford Union . . .	The Sun and Thirteen Cantons, Silver-street, Golden-square.	20 October, 1832.
The Hope . . .	The Craven Arms, Marshal-st., Golden-square.	25 October, 1832.
Hearts of Oak . . .	The Running Footman, Charles-street, Berkeley-square.	Ditto.
The Chesterfield Union .	The Old Chesterfield Arms, Shepherd's-market, May-fair.	23 October, 1834.
United Friends . . .	The Harp Tavern, Jermyn-st. .	April, 1835.
The Benevolent Brothers	The Three Compasses, Silver-street, Golden-square.	14 January, 1836.

V.—Savings' Banks.

There are no Savings' Banks in this district excepting such as are opened by Clergymen for the use of their parishioners, in which small deposits are received, and returned at the end of the year with an addition either in money or articles of clothing. These are, however, strictly speaking, charitable institutions, and as such will not at present be further described.*

VI.—Reading and Literature.

That the two following tables throw a light on the style of reading which prevails among the poorer classes of the people, will be readily

* The Charitable Institutions of the Metropolis will probably form the subject of a future article. In St. James's parochial Savings' Fund there are 990 depositors of above £1 each on the average.

admitted by any one who considers how entirely the reading of the men is confined to newspapers, and how little opportunity females and young people in these classes have of obtaining books, except through the medium of the cheapest circulating libraries. It is true that domestic servants generally have, or might have, the use of the libraries belonging to their masters and mistresses;* but, whether from supposing them to contain none but "good" books, or from having too much other employment, it is certain they very seldom take advantage of this privilege. There are also parochial and lending libraries, in each of the three parishes, attached to the parochial or dissenting schools; still it is probable that the number of persons who avail themselves of these is a very small portion of the whole population. The great mass of reading is from the newspapers and small circulating libraries, and the numbers and qualities of these last will be seen at once by inspection of the following lists:—

The Number of Books found in 10 small Circulating Libraries in the Parishes of St. George, St. James, and St. Anne.

	Number.	Per centage proportion.
Novels by Walter Scott, and Novels in imitation of him; Galt, &c.	166	7.57
Novels by Theodore Hook, Lytton Bulwer, &c.	41	1.87
Novels by Captain Marryat, Cooper, Washington Irving, &c.	115	5.24
Voyages, Travels, History and Biography	136	6.21
Novels by Miss Edgeworth, and Moral and Religious Novels	49	2.27
Works of a good character, Dr. Johnson, Goldsmith, &c.	27	1.23
Romances, Castle of Otranto, &c.	76	3.46
Fashionable Novels, well known	439	20.
Novels of the lowest character, being chiefly imitations of Fashionable Novels, containing no good, although probably nothing decidedly bad	1008	46.
Miscellaneous Old Books, Newgate Calendar, &c.	86	3.92
Lord Byron's Works, Smollett's do., Fielding's do., Gil Blas, &c.	39	1.78
Books decidedly bad	10	.45
Total	2192	100.

The above table shews the proportions of the different characters of books found in 10 libraries which have been thoroughly analyzed and counted. The catalogues of 15 more libraries have been looked over by the writer, and by publishers who have kindly lent their assistance, and have been found to contain, upon the whole, a class of books in a trifling degree better. In the other libraries visited, permission was not obtained to take a copy of the catalogues, or no catalogue was kept; yet even in these last some knowledge of the books was obtained by inspecting them on the shelves. There are in all 38 small libraries in the district.

In one instance only, and this is worthy of remark as reflecting great credit on the parties who keep and use these small circulating libraries, were any books of an immoral character found; and in the case of this exception, the books were kept on a separate shelf and not intended for general circulation, but, as the person who kept the shop stated, "for the use of the waiters of a neighbouring hotel, who were sent out for them by the gentry attending the coffee-room."

* The Editor is acquainted with one gentleman, a worthy baronet, who takes in a second copy of the Penny and Saturday Magazines solely for the use of his servants.—[Ed.]

Newspapers and other Publications found in the Coffee, Public, and Eating houses in the Parishes of St. George, St. James, and St. Anne Soho.*

PUBLICATIONS.	Coffee-Houses.	Public-Houses.	Eating-Houses.	PUBLICATIONS.	Coffee-Houses.	Public-Houses.	Eating-Houses.
<i>Reviews.</i>							
Quarterly	3	.	.	Liverpool Mercury . .	1	.	.
Edinburgh	3	.	.	Northern Liberator . .	1	.	.
British and Foreign . .	3	.	.	Stamford Mercury . .	1	.	.
London and Westminster	3	.	.	Welshman	1	.	.
				Scotsman	4	.	.
<i>Newspapers.</i>				<i>French Papers.</i>			
Athenæum	4	.	.	Almanac de Commerce .	1	.	.
Age	3	3	.	Almanac de Gotha . .	1	.	.
Bell's Life in London .	28	53	4	Bon Sens	1	.	.
Bell's Messenger . . .	7	4	1	Constitutionnel . . .	4	.	.
Court Journal	3	.	.	Courier	2	.	.
Courier	9	5	1	Journal des Débats . .	1	.	.
Cleave's Penny Gazette .	2	.	.	Gazette des Tribunaux .	1	.	.
Crown	1	.	.	Messenger	1	.	.
Era	1	28	.	National	1	.	.
Examiner	5	2	1	Parterre	1	.	.
Figaro	22	.	1	Panorama de Londres .	1	.	.
Globe	16	20	3	Sicile	1	.	.
Globe and Traveller .	1	1	.				
John Bull	4	4	.	<i>Publications.</i>			
London Journal . . .	1	.	.	Bentley's Miscellany .	1	.	.
Morning Chronicle . .	35	55	20	Boz's Miscellany . . .	1	.	.
Morning Post	4	1	1	Blackwood's Magazine .	6	.	.
Morning Herald . . .	20	33	11	British Almanac, &c. .	1	.	.
Morning Advertiser . .	14	248	2	Chambers' Edinburgh	25	1	2
Magnet	1	.	.	Journal			
News	3	2	2	Casket	4	.	.
Observer	2	8	.	Calendar of Horrors .	1	.	.
Patriot	1	.	.	Doctor	1	.	.
Paul Fry	5	2	.	Engineers' and Archi-	1	.	.
Penny Satirist	5	.	.	itects' Journal			
Satirist	15	9	5	Frazer's Magazine . .	4	.	.
Standard	5	4	4	Franklin's Miscellany .	1	.	.
Star	2	.	.	Guide to Knowledge . .	2	.	.
Spectator	3	.	1	Lancet	2	.	.
Sun	43	33	6	Literary Gazette . . .	3	.	.
Sunday Herald	1	1	.	Mechanic's Magazine .	2	.	.
Sunday Times	12	37	5	Metropolitan Magazine .	2	.	.
Times	40	28	13	Mirror	21	.	1
Town	14	3	.	Musical World	1	.	.
Weekly Dispatch . . .	37	189	12	Monthly Magazine . .	3	.	.
Weekly Chronicle . . .	3	2	.	New Monthly Magazine .	5	.	.
Weekly Post	1	.	.	Nicholas Nickleby . .	3	.	.
				Pickwick	10	.	.
<i>Country Papers.</i>				Penny Magazine . . .	10	.	.
Brighton Patriot . . .	1	.	.	Penny Story-teller . .	6	.	.
Bristol Mirror	1	.	.	Saturday Magazine . .	16	.	.
Cambrian	1	.	.	Tales of the Wars . . .	5	.	.
Dublin Register . . .	1	.	.	Tait's Magazine . . .	4	.	.
Dublin Freeman's Journal	1	.	.	United Service Journal .	3	.	.
Dublin Evening Mail .	1	.	.	Wars of Europe . . .	2	.	.
Edinburgh Patriot . .	1	.	.	Wilson's Tales of the	1	.	.
Glasgow Herald . . .	1	.	.	Borderers			
Glasgow Liberator . .	1	.	.	Weekly Magazine . . .	9	1	1

* This part of the list was obtained with great difficulty from the publicans; nor would it probably have been obtained so correctly, but through the perseverance of a very zealous agent.

VII.—*Criminal Statistics.*

Upon this head very full information will be found in the two Tables, at the end of this article, obligingly furnished by the Commissioners of Police, and in the comparison drawn from them. It is a fortunate circumstance that the limits of the C. division of police are nearly identical with those of the three parishes under notice. A small portion in the south-east is included in the police district which belongs to other parishes; but on the other hand, a larger section of the south-western extremity is excluded, leaving, however, by far the greatest part of the two districts identical, and thus affording the means of an accurate comparison with the rest of the metropolis.

In comparing these two Tables, the former relating to the whole of the metropolitan police district, and the latter to the division of St. James's, with the view of discovering the nature and prevalence of offences within the latter portion, the following results are deduced.

It is to be regretted that neither the number of the population in this division, nor the proportion which it bears to that of the whole district, can be stated; other means of comparison must therefore be adopted.

The proportion which the number of persons taken into custody in this division bears to the total number, is 11·7; but if the five following minor classes of offences be excluded from the comparison, viz., Drunkenness, Disorderly Characters, Prostitutes, Suspicious Characters and Vagrants, the proportion becomes reduced to 6·6. The rate of these classes alone is 14·5. These facts shew that there is a great preponderance of these offences in this division, which is confirmed by the observation and experience of the officers of police.

Upon a comparison of the sexes, it appears that in this division the number of females apprehended is proportionally greater than in the remainder of the district, the proportion being 38 in 100 individuals, while in the remainder of the district it is only 33 in 100, a difference of 5 per cent. This excess, it must be observed, is not confined to the disorderly and suspicious classes of offence, but is equally great among those of assaults and simple larceny, the difference being 4 per cent. in the former, and 7 per cent. in the latter instance. One other point is worthy of notice, although it may probably arise from a greater strictness of practice in entering the charges at the station-houses. Whilst the proportion of female to male Drunkards, Suspicious Characters, and Vagrants, is greater in this division than throughout the whole district, yet the proportion of Disorderly Characters is considerably less, being only 31 per cent., while in the remainder of the district it is 36·5.

The next subject for consideration is the nature of the offences. As the proportion which the population of this division bears to that of the whole district cannot be shewn, the most obvious way of discovering the kinds of offences most prevalent in this division cannot be employed; but they may be exhibited in another way, by calculating the proportion which the number of persons apprehended for each class of offence in the division bears to the number in the same class throughout the whole district, and examining how much the result in each case exceeds or

falls short of the proportion between the total number of offences of all classes. The latter was stated to be 11·7 per cent., including the five most trivial and most numerous classes of offences, viz., Vagrants, which amount to 20·5 per cent. ; Suspicious Characters, amounting to 20·2 per cent. ; Drunkenness to 17·7 per cent. ; Prostitutes to 13·2 per cent. ; and Disorderly Characters, which, as before observed, are less numerous in this division, to 9·2 per cent.

If, however, these five classes be excluded, the proportion is 6·6 per cent., and with these figures the comparison should rather be made. In some of the classes the number of cases is so small as not to admit of a fair contrast; and in others no offences whatever occurred within the division.

In general the Offences against the Person are proportionably few; murder and manslaughter are below the average, and of some heinous crimes there are no instances whatever, but the number of attempts to commit an unnatural crime is very large, amounting to 5 in number, or 38· per cent. of the whole number committed in the district. Assaults are somewhat more numerous than in the rest of the district, particularly attempts to rescue from custody, and to obstruct police constables on duty.

The number of Offences against Property committed with Violence is very small, comprising only 4 out of 50 cases of burglary, while there are no cases of breaking or entering into dwelling-houses or buildings, and none of robbery. This fact deserves notice; and as the district is very wealthy, the absence of offences of this kind can only be attributed to the excellent watch maintained by the police.

The next division of the table contains Offences against Property committed without Violence. It was to be expected that the cases of cattle-stealing would be few, unless perhaps that of horses be excepted. There were, however, no cases of this latter class in 1837. Of larcenies in a dwelling-house to the value of 5*l.* there was a great excess, presenting 14 out of the 63 cases which occurred in the whole district, but of other larcenies in a dwelling-house, there was a very remarkable deficiency, the number being only 2 out of 549 cases. The proportion of other kinds of larceny was not much in excess; that of simple larcenies being rather less than the general ratio. The remaining offences in this division of the table do not call for any remark, with the exception of cases of pawning illegally, and unlawful possession of goods, the proportion of which is very small.

Of the two cases of Arson in the whole district, one occurred in this division. The number of cases of wilful damage is little more than half the average ratio. Cases of forgery amounted to 22· per cent of the whole number committed within the police district, and those of coining to 10·8 per cent. In the remaining division of miscellaneous offences only one class besides those before-mentioned requires notice, viz., Nuisances under Metropolitan Street Act, Sewers, &c., which amount to 16·3 per cent.

One remarkable though not wholly unexpected feature presented by this division, is the proportionably greater number of educated persons taken into custody. The following abstract will best shew this fact.

Per Centage Proportion of Individuals possessing the several following Degrees of Instruction, to the total number taken into Custody.

	In the Division.		In the remainder of the District.
Could neither read nor write	31.5	Per Cent.	46. Per Cent.
Could read only, or read and write imperfectly	48.	,,	43.1 ,,
Could read and write well	18.	,,	9.4 ,,
Had received a superior education	2.5	,,	1.5 ,,
	<hr/> 100.		<hr/> 100.

In the two best instructed classes the proportion is nearly double in this division, and the number totally uninstructed is very much smaller.

This difference, however, occurs almost wholly among the cases of common assaults, wilful damage, disorderly characters, and drunkenness, to which offences educated persons are most addicted, who, from their superior circumstances in life, are generally removed from the temptations to commit more serious offences. This will be seen in the following statement referring to the division of St. James's.

	Cases of Assault, Wilful Damage, Disorderly Characters, and Drunkenness.		Other Cases.
Could neither read nor write	27.	Per Cent.	40.5 Per Cent.
Could read only, or read and write imperfectly	47.5	,,	49.1 ,,
Could read and write well	22.	,,	10. ,,
Had received a superior education	3.5	,,	.4 ,,
	<hr/> 100.		<hr/> 100.

Here it will be seen that the excess in this class is very great among the educated persons, who amount to 25.6 per cent., while in the commission of other kinds of offences they amount only to 10.4 per cent.

The same is not the case in the remainder of the district. There the proportion of persons taken into custody for the offences above specified, was as follows:—

Could neither read nor write	40.8 Per Cent.
Could read only, or read and write imperfectly	45. ,,
Could read and write well	11.8 ,,
Had received a superior education	2.4 ,,
	<hr/> 100.

These proportions differ little from those of the total number of persons apprehended for all kinds of offences in the same portion of the district.

The superior instruction of the offenders in this division will be shewn in a very strong light in the following table, which exhibits the per centage proportion of the total number of offenders, and of the classes above specified within the division, to the same classes in the

whole district, and a similar comparison of the educated and uneducated offenders in the same classes. If the degree of instruction were the same throughout the district, the proportions of the latter would be in each case similar or approximate to the former, but the contrast is very striking.

Per Centage Proportion of Offenders in the St. James's Division to those in the whole of the Police District.

	All kinds of Offences.	Common Assaults.	Willful Damage.	Disorderly Characters.	Drunkenness.	Other Offences.
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Can neither read nor write	8.4	5.	1.7	5.9	12.7	8.9
Can read only, or read and write imperfectly	12.9	8.	2.9	10.6	18.1	9.9
Can read and write well	20.2	12.5	7.2	15.9	30.	7.6
Have received a superior education	17.6	17.4	22.6	8.5	24.	1.2
Proportion of Total Number of Offenders	11.7	7.8	3.7	9.2	17.7	9.

If this division resembled the rest of the district, the figures in each of the columns ought to be about the same as those in the bottom line; but it will be seen how greatly the educated classes preponderate in the first five columns, while in the last they actually are less numerous, confirming what has been stated with respect to the excess of educated persons being confined to the offences distinguished in the preceding table.

It is perhaps worthy of remark, that only one female is to be found among the persons who had received a superior degree of instruction, and that was a case of vagrancy, and very probably one of misfortune.

To recapitulate, therefore, it appears that offences arising from drunken and disorderly conduct are very frequent in this division; but that they are committed chiefly by persons in a rank of life above the labouring classes—that crimes of violence, housebreaking, and violent robbery are rare—that larcenies in dwelling-houses are also rare; but when they do occur, the amount of property taken is above the average, confirming the fact, before noticed, of the opulence of the division;—that the proportion of vice or crime among females is greater than in the rest of the district: and, lastly, that the proportion of instructed persons taken into custody is considerably greater in this division, but that it is confined to cases of disorderly or drunken conduct.

Table shewing the Number of Persons taken into Custody throughout the whole of the Metropolitan Police District, in the Year 1837; together with the Degree of Instruction possessed by the same.

OFFENCES.	Total in the Year 1837.			Neither Read nor Write.		Read only, or Read and Write Imperfectly.		Read and Write Well.		Superior In- struction.	
No. 1. Offences against the Person.	M & F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Murder	25	20	5	5	3	11	1	4	1	..	..
— by Shooting at, Stabbing, Administer- ing Poison, &c.	1	1	..	..	..	..	..	..	1	..	..
— by Cutting & Wounding, with intent, &c.	53	47	6	15	3	30	2	3	1	..	..
— by Concealing Birth of their Infants	5	..	5	..	3	..	..	..	..	..	..
Manslaughter	22	22	..	4	..	15	..	8	..	..	..
Sodomy	2	2	..	1	..	1	..	..	..	..	..
— Assaults, with intent to commit, &c.	12	12	..	3	..	4	..	4	..	2	..
— Extorting Money under threats, &c.	2	2	..	..	..	..	..	..	..	..	..
Rape	6	6	..	..	..	4	..	1	..	1	..
— Assaults, with intent to commit, &c.	18	18	..	4	..	9	..	5	..	..	..
Bestiality	4	4	..	3	..	1	..	..	..	..	..
Bigamy	12	8	4	..	3	7	1	1	..	..	..
Child Dropping	2	..	2	..	2	..	..	..	..	..	..
— Stealing	1	..	1	..	..	..	1	..	..	..	..
Assaults, Common	5086	4999	727	1310	435	3188	235	678	87	136	..
Attempting to Rescue from Custody	264	226	38	88	28	108	6	43	2	17	..
Obstructing Police Constables on Duty	187	154	28	56	17	67	10	29	6	2	..
No. 2. Offences against Property committed with Violence.											
Burglary	50	48	2	18	1	34	1	6	..	..	..
Breaking into a Dwelling-house and Stealing	48	42	6	12	4	21	2	7	..	1	..
— into a Dwelling-house, with intent, &c.	31	29	2	9	2	19	..	1	..	..	..
— within the Curtilage of a Dwelling- house and Stealing	1	1	..	..	..	1	..	..	..	..	..
— Shops, Warehouses, Counting-houses, &c.	8	8	..	4	..	4	..	..	..	..	..
Robbery	42	37	16	4	10	17	2	6	3	..	..
No. 3. Offences against Property committed without Violence.											
Cattle Stealing	8	8	..	1	..	5	..	3	..	1	..
Horse Stealing	45	45	..	9	..	30	..	5	..	1	..
Sheep Stealing	3	3	..	1	..	2	..	..	..	..	..
Larceny in a Dwelling-house to Value of £50	63	44	19	8	12	30	7	4	..	2	..
— in a Dwelling-house	549	553	236	98	91	123	191	55	14	8	..
— from the Person	1045	636	550	166	289	264	229	60	21	6	1
— by Servants	300	136	64	28	37	78	36	1	4	..	..
— from Letters containing Bank Notes, &c.	6	4	1	..	..	..	..	3	1	2	..
— Simple	6094	5377	2617	2374	1856	2223	978	448	80	23	2
Misdemeanors, with intent to Steal	651	531	120	231	54	263	61	36	3	1	3
Embezzlement	265	227	28	69	19	178	16	77	3	6	..
Receiving Stolen Goods	150	89	61	31	53	85	27	26	1	..	..
Frauds	406	314	91	71	41	163	43	65	8	16	..
Conspiracy, with intent to Defraud	4	4	..	..	..	3	..	1	..	..	..
Dog Stealing	22	71	11	21	8	40	3	8	..	2	..
Pawning illegally	439	182	247	75	104	91	139	28	4	1	..
Unlawful Possession of Goods	3190	2604	686	1120	458	1166	230	306	6	10	..
No. 4. Malicious Offences against Property.											
Arson	2	1	1	1	..	..	1	..	..	..	..
Wilful Damage	1725	1271	454	296	295	569	147	361	12	53	..
No. 5. Forgery, and Offences against the Currency.											
Forging, and uttering Forged Instruments	15	11	4	..	..	5	1	1	3	5	..
— Coining	7	4	3	..	1	4	2	..	..	..	..
Coin (Counterfeit), putting off, uttering, &c.	363	577	286	179	194	344	83	51	6	3	..
No. 6. Other Offences, not included in the above Classes.											
Absconding from their Bail	2	2	..	..	..	..	2	..	..	..	..
Apprentices, Runaway	118	114	4	19	1	65	2	30	1	..	..
Attempting to commit Suicide	61	28	33	4	12	19	19	8	2	1	1
Cruelty to Animals	38	84	1	44	..	22	1	8	..	..	..
Deserting their Families	119	75	44	28	26	37	18	9	1	1	..
Deserters	69	69	..	15	..	45	..	8	..	1	..
Disorderly Characters	7659	4900	2759	1523	1668	2408	1012	619	73	157	7
— Prostitutes	3103	..	3108	..	1773	1837	..	89	..	..	4
Drunkenness	21426	14081	7405	4093	4218	6980	2638	2449	340	519	9
Furious Driving	96	96	1	14	1	25	..	27	..	9	..
Gambling	266	266	1	167	..	169	1	27	..	3	..
Hawking without Licence	21	20	1	9	..	10	1	1	..	..	..
Illicit Distillation	28	24	4	9	1	10	3	5	..	..	..
Indecently exposing the Person	296	208	88	39	40	99	44	60	4	10	..
Nuisances	9	2	..	3	..	..	..	..	..	..	..
— under Metropolitan Street Act, Sewers, &c.	391	308	88	113	55	163	25	33	2	2	..
Reputed Thieves	821	784	137	445	75	326	69	19	..	1	..
Suspicious Characters	1684	1451	183	1107	124	178	58	161	6	5	..
Vagrants	4287	2805	1428	1588	1037	1068	408	133	33	21	4
Total	44416	42494	31223	15463	12033	26071	6071	5688	787	1023	31

Table shewing the Number of Persons taken into Custody within the C, or St. James's Division, of the Metropolitan Police, in the Year 1837; together with the Degree of Instruction possessed by the same.

OFFENCES.	Total in the Year 1837.			Neither Read nor Write.		Read only, or Read and Write Imperfectly.		Read and Write Well.		Superior Instruction.		Per Centage Proportion to the whole of the Metropolitan Police District.
	M. & F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
No. 1.												
Offences against the Person.												
Murder	1	1	..	..	..	1	..	..	..	..	..	4*
— by Cutting and Wounding, with intent, &c.	5	4	1	..	..	4	1	..	..	..	..	9*4
Manslaughter	1	1	..	..	..	1	..	..	..	..	..	4*5
Assaults, with intent to commit Sodomy, &c.	5	5	..	..	..	2	..	3	..	..	..	38*4
Assaults, with intent to commit Rape, &c.	1	1	..	..	..	..	..	1	..	..	..	5*5
Child Dropping	1	..	1	..	1	..	..	..	..	..	..	50*
Assaults, Common	396	311	85	52	35	153	42	84	8	22	..	7*8
Attempting to Rescue from Custody	27	24	3	3	2	11	1	7	..	3	..	10*2
Obstructing Police Constables on Duty	20	18	2	4	..	6	2	6	..	..	..	10*7
No. 2.												
Offences against Property committed with Violence.												
Burglary	4	3	1	..	..	3	1	..	..	..	..	8*
No. 3.												
Offences against Property committed without Violence.												
Cattle Stealing	1	1	..	..	..	1	..	..	..	..	..	12*5
Larceny in a Dwelling-house to the Value of £5	14	11	3	1	3	10	..	..	..	..	..	22*2
— in a Dwelling-house — from the Person	2	2	..	..	..	2	..	..	..	..	..	3
— by Servants	17	37	43	10	12	22	25	5	6	..	..	7*6
— Simple	497	304	128	78	75	170	96	56	20	..	..	8*1
Embezzlement	31	26	5	3	1	15	3	8	1	..	..	8*5
Receiving Stolen Goods	9	5	4	1	3	3	1	1	..	..	..	6*
Frauds	27	20	7	2	..	9	6	8	1	1	..	6*6
Dog Stealing	7	7	..	2	..	4	..	1	..	..	..	8*5
Pawning illegally	7	4	3	1	..	3	2	..	1	..	..	1*6
Unlawful Possession of Goods	28	20	8	6	6	11	2	3	..	..	..	9
No. 4.												
Malicious Offences against Property.												
Arson	1	..	1	..	..	..	1	..	..	..	..	50*
Wilful Damage	64	52	12	6	6	19	2	15	4	12	..	3*7
No. 5.												
Forgery, and Offences against the Currency.												
Forging and uttering Forged Instruments	4	4	..	..	..	2	..	..	..	2	..	26*6
Coin (Counterfeit), putting off, uttering, &c.	93	58	35	13	22	39	12	6	1	..	..	10*8
No. 6.												
Other Offences not included in the above Classes.												
Apprentices, Runaway	11	9	2	2	..	5	1	2	1	..	..	9*3
Cruelty to Animals	2	2	..	..	1	2	..	..	..	..	..	2*2
Deserting their Families	2	1	1	1	1	..	..	..	..	..	..	1*7
Deserters	4	4	..	1	..	2	..	1	..	..	..	5*8
Disorderly Characters	708	468	220	80	108	269	95	125	17	14	..	9*2
— Prostitutes	411	..	411	..	186	..	205	..	20	..	..	13*2
Drunkenness	3791	2367	1424	455	600	1082	693	703	131	127	..	17*7
Furious Driving	7	7	..	..	..	5	..	2	..	..	..	7*3
Gambling	26	16	..	3	..	19	..	3	..	1	..	7*1
Illicit Distillation	3	2	1	..	..	1	1	1	..	..	..	10*7
Indecently exposing the Person	6	4	2	1	..	2	2	1	..	..	..	3*
Nuisances under Metropolitan Street Act, Sewers, &c.	64	46	18	21	18	21	..	4	..	..	..	16*3
Suspicious Characters	331	290	41	83	23	170	15	37	3	..	..	20*2
Vagrants	862	530	362	232	229	244	111	50	11	4	1	20*5
Total	7,991	4,704	2,287	1,082	1,335	2,331	1,326	1,135	225	186	1	11*7

N. B. A Table of the ages cannot be given, in consequence of no Table having been kept of the ages of persons taken before Magistrates and discharged. The ages of those summarily convicted and committed for trial only are kept.

A Review of the Prices of Corn in Prussia during the 22 years from 1816 to 1837. Translated from the "Allgemeine Preussische Staatszeitung," Nos. 85 and 86, 1838.

A VERY large part of the corn which is produced in the Prussian States is immediately consumed by the cultivators of the soil. Those persons also, whose assistance the agriculturist requires for other purposes than the mere tillage of the land, are principally paid by allowances of corn, or portions of land; as, for instance, overseers, foresters, clergymen, schoolmasters, bailiffs, and other public officers, together with artisans whose services it is necessary to secure. Only the surplus of the produce is usually destined for the market; but there may be exceptions to this rule, arising from two causes. A necessity for procuring gold coin may become so imperious that more corn must be sold than can be spared after supplying the natural demand; in such unfortunate circumstances the agricultural population is insufficiently nourished, and if, through the progress of civilisation, it is no longer exposed to the danger of starvation, yet care and want enter in with their enfeebling effects, and leave behind but too sensible consequences. Diseases, which might once have been withstood, now end fatally; weaknesses, otherwise happily overcome, now leave a lurking evil behind; and mortality increases, while domestic anxieties lessen the number both of births and of marriages. It may be, however, that less corn is sold than what remains after the full supply of the natural wants of the population; as, for instance, if there be not a sufficient demand, or if the means are wanting of bringing the produce to a market where it is required; in such cases also there will be bitter complaint, and it will immediately be very sensibly felt, whenever there is a demand for gold. Since, however, a surplus in the stock of corn can in that case be employed in increasing the nourishment of the labouring class, and improving the stock of cattle, the ultimate consequences of such a stagnation may be very beneficial, if it produces a judicious increase of the consumption, and not a diminution of cultivation. It has often threatened to have the latter effect; but in a reasonable state of civilisation this is not to be feared, since active and prudent men never entirely relinquish the hope of finding a better sale in due time.

In the markets the proportion of the supply to the demand regulates the price of corn, as of any other merchandise. The most constant demand is always that which is created by the internal consumption. The more that men require food, which they cannot themselves raise, nor derive from fixed allowances, and the greater the enjoyments which these men allow themselves, the less reason is there to fear a stagnation in the sales through want of a demand. Where the great mass of the inhabitants not only raise their own food, or receive it in allowances, but also clothe themselves in the produce of their own frames and looms, and have but little occasion of gold coin, even for the preparation of their dwelling, and the furniture of their house and household, there the number of men cannot be considerable whom the profits of an employment, of which the productions are consumed in the country, place in a position to purchase food in the markets. If there be no other demand, the prices of corn can be very low only in years of moderately-good

harvests, because little remains over to bring to market. It is true, that in such circumstances a high price of corn may be created by a foreign demand; but this is the more uncertain, exactly in proportion as it has corn for its object—corn takes up so much space in proportion to its value, and its weight is so great, that it can only be carried the distance of one or two days' journey by land, and even by sea cannot easily be transported with advantage to any distant place, the voyage to which lasts more than a month. If a pound of pure silver contains 28 dollars, and the average price of a bushel of wheat of 85 lbs. amounts in Prussia, as will be presently shewn, to 1 dollar 23 silver groschen and 10½ pennies, 1325 lbs. of wheat may be bought for one pound of silver. There is therefore an important preparation required to remove the value of one pound of silver, if it is to be transported in the shape of wheat. The carriage of the less costly kinds of corn is still more difficult. If a country does not export its corn, but the produce of the labour of those who consume the surplus of its corn, the difficulties of exportation diminish in proportion as the value of a pound of this produce is more or less great. If, for instance, part of the population were engaged in mining and in the preparation of bar-iron, a pound of which is on an average worth about 2 silver groschen, then 420 lbs. of iron must be exported for the value of one pound of silver; and yet that is not a third of the weight of the same sum laid out in wheat. If coarse cloth of native wool were exported, which is worth only 20 silver groschen the pound, then 42 lbs. of cloth must be exported for the value of one pound of silver; that is, however, not a thirtieth part of the weight which is contained in the same money amount of wheat. A country which possesses the means of selling its corn of home-growth by the preparation of productions for exportation, facilitates the sale of the disposable corn, while it substitutes for it a lighter and more portable merchandise; and this, indeed, it does, exactly according to the proportion in which native labour enters into the merchandise. The foreign sale, however, whether it be of corn, or of manufactures, in the preparation of which the corn is consumed, always remains dependent upon the competition and commercial laws of foreign nations: it is therefore very uncertain, and may be very easily annihilated by circumstances which no human prudence may be able to foresee, and no power of any State be sufficient to avert. The interruption of prosperity is felt the more sensibly in proportion to the suddenness of such stoppages of trade, and the less prospect there appears of relief: this has been painfully experienced in the Prussian provinces, in which it had become a proverb, that they manufactured wheat for England, while that country manufactured for them sugar and coffee in her colonies, and within her own territory many productions of manufacturing industry. Much, however, as a trade with foreign countries may contribute to the speedy establishment of prosperity, yet that condition can only be secured to States by means of their internal consumption; the more fruitful the labours of a people are in the supply of their own wants, the higher will its prosperity rise, and the more firmly at the same time will it be rooted.

The prices of corn in the several provinces of Prussia will afford a most instructive illustration of these general laws.* They are given monthly in the Prussian Official Gazette, according to the returns of the

* The following are the average Annual Prices of the Prussian bushel, stated in silver groschen, for each province and each year, with averages for each period of 14 years, and for the whole period:—

WHEAT.							
Periods.	Prussia Proper.(a)	Posen.	Brandenburg and Pomerania.	Silesia.	Saxony.	Westphalia.	Rhenish Provinces.
	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.
1816	70 1	78 10	84 9	94 11	96 10	110 7	112 2
1817	100 5	96 10	115 11	106 0	122 6	152 0	165 0
1818	94 3	78 4	101 8	80 7	92 4	103 1	105 9
1819	65 5	60 5	72 11	61 10	61 5	77 10	72 1
1820	51 10	52 1	56 9	55 1	52 3	59 7	65 1
1821	48 8	54 7	54 7	67 5	48 8	62 1	56 10
1822	49 5	54 2	50 9	62 8	50 7	60 4	55 8
1823	46 0	52 2	50 10	57 0	51 10	54 2	58 4
1824	34 9	35 11	38 1	39 10	39 9	36 4	39 9
1825	32 5	32 2	33 10	35 2	33 10	35 0	40 11
1826	35 5	36 0	40 0	39 5	33 5	38 3	44 2
1827	42 4	44 1	49 1	47 10	41 11	55 1	56 7
1828	51 8	51 0	54 6	56 9	56 8	62 7	72 6
1829	61 5	60 1	66 8	58 11	65 8	75 3	78 7
1830	56 3	55 9	64 8	53 9	60 8	77 7	75 11
1831	75 5	78 2	74 9	71 9	67 0	92 11	91 2
1832	64 9	59 8	63 7	51 4	56 10	71 11	83 8
1833	47 6	44 3	44 9	41 2	41 11	50 7	57 2
1834	45 1	43 10	43 9	43 2	39 1	43 8	49 1
1835	43 7	46 9	45 4	49 9	42 1	44 7	49 4
1836	39 8	39 10	43 6	39 9	44 2	46 7	52 0
1837	42 8	44 7	49 3	41 1	47 0	50 11	58 0
Average of							
1816-29	52 3	54 3	58 1	58 9	56 1	64 10	66 7
1817-30	50 10	52 0	56 1	56 1	52 11	62 3	63 7
1818-31	50 10	52 0	56 1	56 1	52 11	62 3	63 7
1819-32	50 9	51 11	55 2	54 6	52 1	61 8	63 7
1820-33	49 1	50 4	52 11	52 5	50 1	59 0	62 1
1821-34	48 4	49 7	51 8	51 3	48 9	57 5	60 6
1822-35	47 10	48 9	50 9	49 11	48 2	55 8	59 9
1823-36	46 11	47 4	50 0	48 0	47 6	54 3	59 4
1824-37	46 7	46 7	49 10	46 5	47 0	53 11	59 4
Average of the whole Period .							
	49· 3	50· 4	53· 5	52· 7	50· 7	59· 0	62· 0

(a) Prussia Proper, comprising the districts (Regierungs-bezirken) of Königsberg, Gumbinnen, Dantzic, and Marienwerder; Posen, comprising those of Posen and Bromberg; Brandenburg and Pomerania, comprising those of Potsdam, Frankfurt, Stettin, Köslin, and Stralsund; Silesia, comprising those of Breslau, Oppeln, and Leignitz; Saxony, comprising those of Magdeburg, Merseburg, and Erfurt; Westphalia, comprising Münster, Minden, and Arnberg; and the Rhenish provinces, comprising Cologne, Düsseldorf, Coblenz, Trier, and Aix-la-Chapelle.

local authorities from a considerable number of those towns in which the trade in corn appears particularly remarkable. From these are framed monthly averages for the several provinces, with the exception of Brandenburg and Pomerania, which, from their close connexion in agricultural economy, are here united together. From these, yearly averages are calculated; and from these, again, other averages for 14 years; so that in each period of 14 years the two dearest and the two cheapest years are left out, and only the remaining 10 are taken into account in calculating the average. This process has now continued for 22 years, from 1816 to 1837, and the period contains nine averages of 14 years each, from which, lastly, an arithmetical mean price is further calculated. It cannot, however, be asserted that this mean is actually the average

RYE.							
Periods.	Prussia Proper.	Posen.	Brandenburg and Pomerania.	Silesia.	Saxony.	Westphalia.	Rhenish Provinces.
	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.
1816	42 7	47 1	54 6	68 1	76 10	89 6	91 10
1817	56 10	59 4	73 5	75 11	97 5	118 9	131 8
1818	52 10	49 7	67 6	52 1	69 9	82 6	79 6
1819	42 10	40 6	54 2	41 0	47 7	63 6	57 2
1820	30 10	30 11	37 7	35 4	38 6	42 10	46 3
1821	25 11	27 10	29 2	37 3	32 5	41 10	36 9
1822	30 4	34 10	30 11	44 5	35 1	40 11	40 5
1823	32 7	38 5	36 11	47 6	41 10	41 9	49 4
1824	16 2	17 10	21 1	24 3	24 0	22 3	25 9
1825	17 6	16 5	20 10	18 6	20 5	21 11	28 10
1826	26 4	25 5	30 9	27 0	27 3	30 10	36 3
1827	32 11	37 4	42 2	43 0	40 1	50 4	48 2
1828	28 0	37 5	38 5	46 3	47 5	50 2	54 2
1829	26 11	31 7	36 4	37 9	41 5	46 2	51 9
1830	28 0	35 0	37 0	40 8	38 10	59 0	54 4
1831	42 8	53 3	51 8	49 0	50 1	72 2	68 7
1832	39 9	42 2	47 7	40 7	48 1	57 10	65 7
1833	33 7	28 6	32 8	28 8	34 9	39 8	43 3
1834	32 4	29 3	32 10	31 5	30 11	33 3	36 5
1835	33 6	32 6	36 7	32 9	33 2	36 5	37 9
1836	23 8	23 2	30 6	22 8	32 10	34 5	38 10
1837	26 9	27 3	31 9	26 9	36 4	36 0	45 9
Average of							
1816-29	31 11	35 2	39 1	41 2	42 2	49 1	50 0
1817-30	30 6	33 11	37 4	40 0	39 0	46 9	47 5
1818-31	30 5	33 11	37 1	40 0	39 0	46 9	47 5
1819-32	30 2	33 11	36 8	39 4	39 0	46 2	47 5
1820-33	29 6	32 9	35 2	38 1	37 9	44 3	46 1
1821-34	29 8	32 7	34 9	37 8	37 0	43 3	45 1
1822-35	30 5	33 0	35 5	37 3	37 1	42 9	45 2
1823-36	29 9	31 10	35 5	35 1	36 10	42 1	45 0
1824-37	29 2	30 9	34 11	33 1	36 4	41 6	44 8
Average of the whole Period.	30· 2	33· 1	36· 2	38· 0	38· 3	44· 9	46· 6

price of corn in each province of Prussia during these 22 years; it may, however, serve as an approximation to this average, since nothing more accurate is known. A true average can only be obtained when the quantity of corn sold, as well as the price, is known. To inquire into this with certainty and to a sufficient extent is, now at least, impossible. It may, however, be hoped that in a table thus arranged, most of the occasional errors balance one another; and, at all events, its uniformity admits of its being used with sufficient confidence, in comparing together the several provinces.

BARLEY.							
Periods.	Prussia Proper.	Posen.	Branden- burg and Pomerania.	Silesia.	Saxony.	West- phalia.	Rhenish Provinces.
	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.
1816	26 9	31 8	39 9	49 6	50 10	62 7	60 7
1817	35 2	37 8	50 10	56 7	72 2	80 5	94 1
1818	38 10	37 6	50 4	39 11	55 11	59 8	58 11
1819	33 3	31 10	42 5	31 10	38 9	53 6	48 6
1820	21 5	25 2	30 5	26 8	29 9	35 5	37 3
1821	16 7	20 7	22 5	28 6	25 5	30 11	27 6
1822	21 2	24 5	22 3	32 11	29 1	28 1	32 0
1823	25 6	29 9	26 9	35 0	31 3	31 11	39 0
1824	12 6	14 7	16 9	17 10	17 1	19 7	20 8
1825	13 6	14 1	16 7	14 8	17 2	19 8	24 5
1826	20 1	20 7	23 3	20 3	21 5	25 11	28 3
1827	26 4	23 11	31 9	31 8	29 3	38 8	36 4
1828	19 11	28 9	27 1	36 8	32 2	33 11	40 5
1829	18 8	23 10	27 2	31 2	30 10	32 5	36 7
1830	18 5	25 8	26 7	30 4	28 2	38 8	36 9
1831	30 4	38 0	33 2	35 0	34 6	51 0	47 6
1832	30 3	33 11	34 7	31 8	36 1	42 3	52 0
1833	22 1	20 10	23 3	21 7	27 8	31 2	35 9
1834	22 3	22 4	23 9	23 4	23 9	25 5	28 4
1835	26 0	27 7	29 1	29 8	28 4	31 7	30 4
1836	19 5	21 2	24 9	19 8	27 9	29 7	31 5
1837	20 11	21 4	24 9	21 1	28 0	28 4	35 5
Average of							
1816-29	23 0	26 7	29 4	31 5	31 10	37 0	38 6
1817-30	22 2	25 11	28 0	30 6	29 7	34 11	36 3
1818-31	21 10	25 11	27 1	30 4	29 2	34 8	36 2
1819-32	21 10	25 11	27 1	30 0	29 2	33 10	36 2
1820-33	21 0	24 10	26 1	29 0	28 6	32 8	35 0
1821-34	21 1	24 7	25 5	28 8	27 11	31 9	34 1
1822-35	22 0	25 3	26 1	28 10	28 2	31 11	34 4
1823-36	21 10	24 11	26 4	27 6	28 1	31 7	34 4
1824-37	21 5	24 2	26 2	26 1	27 9	31 0	33 11
Average of the whole Period	21·10	25·4	26·10	29·2	28·11	33·4	35·5

OATS.							
Periods.	Prussia Proper.	Posen.	Brandenburg and Pomerania.	Silesia.	Saxony.	Westphalia.	Rhenish Provinces.
	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.
1816	21 0	26 0	29 2	35 6	33 8	37 10	34 1
1817	27 7	28 3	37 8	38 9	40 5	47 11	50 0
1818	29 2	27 10	37 3	31 7	42 5	38 11	32 8
1819	23 11	23 4	32 0	24 4	30 6	38 6	33 8
1820	17 3	20 0	24 4	21 4	23 5	25 4	27 1
1821	13 4	14 11	18 0	20 1	20 5	20 11	16 5
1822	14 7	19 0	18 8	24 3	22 1	19 8	20 6
1823	18 8	22 4	21 6	26 4	25 0	24 10	24 9
1824	10 2	11 6	13 8	13 7	13 0	13 11	13 9
1825	10 4	11 0	12 7	11 11	12 9	14 6	17 4
1826	16 1	15 8	18 5	16 8	16 11	20 3	20 11
1827	20 7	21 0	23 10	23 7	21 9	25 10	23 3
1828	14 8	20 11	21 8	26 1	21 11	23 7	25 3
1829	13 8	18 4	21 3	22 0	21 10	22 3	23 3
1830	13 8	20 4	21 3	23 4	20 9	26 7	22 6
1831	23 0	29 4	25 11	25 1	23 8	34 7	28 9
1832	21 9	24 11	25 7	20 4	25 8	30 5	32 5
1833	15 10	17 7	19 11	15 8	22 1	24 10	25 5
1834	16 0	19 4	19 1	20 3	17 11	20 5	21 4
1835	17 7	21 3	22 6	21 5	21 0	22 1	22 0
1836	13 6	16 0	19 4	14 1	21 0	20 7	22 0
1837	14 4	16 10	19 3	16 0	19 11	18 1	22 4
Average of 1816-29	17 4	20 2	22 11	23 7	23 9	25 11	24 10
1817-30	16 8	19 7	22 1	22 10	22 5	24 9	23 9
1818-31	16 7	19 7	21 6	22 8	21 9	24 5	23 4
1819-32	16 5	19 7	21 5	22 1	21 9	24 0	23 4
1820-33	15 10	19 0	20 11	21 3	21 6	23 5	23 0
1821-34	15 8	18 11	20 4	21 1	20 11	22 11	22 5
1822-35	16 2	19 7	20 10	21 3	21 0	23 0	22 11
1823-36	16 0	19 3	20 10	20 3	20 11	23 1	23 1
1824-37	15 7	18 9	20 8	19 4	20 6	22 5	22 10
Average of the whole Period .	16· 3	19· 5	21· 3	21· 7	21· 7	23· 9	23· 3

The average of all the nine periods of 14 years, from 1816-29 to 1824-37, were as follows, in each province:—

Provinces.	Wheat.	Rye.	Barley.	Oats.
	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.
Prussia Proper.	49 3	30 2	21 10	16 3
Posen	50 4	33 1	25 4	19 5
Brandenburg and Pomerania.	53 5	36 2	26 10	21 3
Silesia	52 7	38 0	29 2	21 7
Saxony	50 7	38 3	28 11	21 7
Westphalia	59 0	44 9	33 4	23 9
Rhenish Provinces	62 0	46 6	35 5	23 3
Average	53·11	38· 1	28· 8	21· 0

The following are the average prices during each of the nine periods of 14 years for the whole State:—

Periods.	Wheat.	Rye.	Barley.	Oats.
	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.	Sil. gr. pf.
1816-29	58 5	41 3	31 1	22 8
1817-30	56 3	39 3	29 7	21 9
1818-31	56 3	39 3	29 4	21 5
1819-32	55 9	38 11	29 2	21 3
1820-33	53 9	37 8	28 2	20 8
1821-34	52 6	37 2	27 8	20 4
1822-35	51 7	37 4	28 1	20 8
1823-36	50 6	36 7	27 8	20 6
1824-37	49 11	35 9	27 4	20 0
Average	53·11	38· 1	28· 8	21· 0

The average price of Wheat was considerably higher during 1837, in all the provinces of Prussia, than during the preceding year. The price per bushel, in silver groschen, was as follows:—

	1836	1837	
Provinces.	Sil. gr. pf.	Sil. gr. pf.	
Prussia Proper.	39 8	42 8	Average of the whole State. Sil. gr. pf. 1836 43 8 1837 47 8
Posen	39 10	44 7	
Brandenburg and Pomerania.	43 6	49 3	
Silesia	39 9	41 1	
Saxony	44 2	47 0	
Westphalia.	46 7	50 11	
Rhenish Provinces.	52 0	58 0	

The average, however, of the 14 years from 1824 to 1837 was rather lower than the average from 1823 to 1836, and was the lowest among the nine general averages of the same number of years since 1816-29, for which data upon similar grounds are furnished in the statistical department. These general averages are as follows:—

	1816-29	1824-37	
Provinces.	Sil. gr. pf.	Sil. gr. pf.	
Prussia Proper.	52 3	46 7	Average of the whole State. Sil. gr. pf. 1816-29 58 5 1824-37 49 11
Posen	54 3	46 7	
Brandenburg and Pomerania.	58 1	49 10	
Silesia	58 9	46 5	
Saxony	56 1	47 0	
Westphalia.	64 10	53 11	
Rhenish Provinces.	66 7	59 4	

These two averages for the whole State are in the proportion of 701 to 599, or nearly 7 to 6. In the last 9 years, therefore, the yearly price of wheat, calculated on the average of 14 years, has fallen in the Prussian states about one-seventh, or 14½ per cent. An explanation of this remarkable fact cannot be found in the accidental circumstances of the weather or of the state of trade during any particular years; for, as has been already mentioned, according to the prescribed method of taking the averages of 14 years, by which the two highest and two lowest years are always left out, unusually good or bad

harvests, and sudden and temporary commercial speculations or stagnations in trade, are not taken into account. Still less can a progressive division of the soil be, with any probability, assigned as a cause of this fall in price, since in the province in which the land is by far the most divided, the prices continue, nevertheless, considerably higher than in any of the other provinces. The consumption of wheat in the country must in all probability have increased, since the population during the last 9 years has increased from not quite 12½ to probably 14 millions, or about 10 per cent. The census, at the end of the year 1828, gave a population of 12,726,110; the result of the enumeration at the end of the year 1837 cannot at present be stated; but there is every probability that it will amount to about 14,000,000. In the laws of foreign nations, which limit the importation of corn from Prussia into their ports, there has been, during the last 9 years, no material change which might account for a progressive decrease in the price of wheat. It can therefore only be by the progress made in the better cultivation of the land, which has caused an increase in the production of wheat, that this fall in the average prices of this kind of grain, during the periods in question, can apparently be explained.

The average price of Rye was also higher in each of the provinces of the State, during the year 1837, than during the year immediately preceding. It was as follows:—

Provinces.	1836	1837		
	Sil. gr. pf.	Sil. gr. pf.		
Prussia Proper.	23 8	26 9	Average of the whole State.	Sil. gr. pf.
Posen	23 2	27 3		
Brandenburg and Pomerania.	30 6	31 9		
Silesia	22 8	26 9		
Saxony	32 10	36 4		
Westphalia	34 5	36 0		
Rhenish Provinces.	38 10	45 9	1836	29 5
			1837	32 11

Nevertheless, the average price of this grain also was lower, during the 14 years from 1824 to 1837 in all the provinces, than during the 14 years from 1823 to 1836; and it is also, with one immaterial exception, of the provinces of Brandenburg and Pomerania, generally the lowest of the nine periods of 14 years quoted. Here also the average for the 14 years from 1816 to 1829 was the highest of the nine similar periods under consideration, and the fall in the interval was as follows:—

Provinces.	1816-29	1824-37		
	Sil. gr. pf.	Sil. gr. pf.		
Prussia Proper	31 11	29 2	Average of the whole State.	Sil. gr. pf.
Posen	35 2	30 9		
Brandenburg and Pomerania.	39 1	34 11		
Silesia	41 2	33 1		
Saxony	42 2	36 4		
Westphalia	49 1	41 6		
Rhenish Provinces.	50 0	44 8	1816-29	41 3
			1824-37	35 9

The average price had therefore fallen from 495 to 429 pennies the bushel. These figures are nearly in the proportion of 15 to 13; and therefore the price of rye fell, according to the averages of the 14 years, less than the price of wheat—namely, about two-fifteenths, or 13½ per cent.

The comparative prices of summer corn were by no means so regular

in their course as those of winter corn. The average price of Barley, especially, was higher in some provinces, and lower in others, in the year 1837, than during the preceding year.

Provinces.	1836	1837
	Sil. gr. pf.	Sil. gr. pf.
Prussia Proper	19 5	20 11
Posen	21 2	21 4
Brandenburg and Pomerania .	24 9	24 9
Silesia	19 8	21 1
Saxony	27 9	28 0
Westphalia	29 7	28 4
Rhenish Provinces	31 5	35 5

The crops of barley in the different parts of the country were notoriously so different, that an average of these single years for the whole State will not afford any useful result. It is true, that among the several periods of 14 years the average price of barley, as of wheat and rye, was greater in all the provinces during the years 1816-29; but the average price from 1824 to 1837 was lowest only in the provinces of Posen, Silesia, Saxony, Westphalia, and in those on the Rhine, whilst in those parts of the country adjoining the East Sea, it was somewhat lower in other years: in Prussia Proper, for instance, it was 21 S. gr. 5 pf. in 1824-37, and 21 S. gr. in 1820-33; and in Brandenburg and Pomerania it was 26 S. gr. 2 pf. in 1824-37, and 25 S. gr. 5 pf. in 1821-34.

If, however, without referring to these years, only the first and last of these nine averages of 14 years be compared, the fall in the price will be as follows:—

Provinces.	1816-29	1824-37	Average of the whole State.
	Sil. gr. pf.	Sil. gr. pf.	
Prussia Proper	23 0	21 5	1816-29 31 1 1824-37 27 4
Posen	26 7	24 2	
Brandenburg and Pomerania .	29 4	26 2	
Silesia	31 5	26 1	
Saxony	31 10	27 9	
Westphalia	37 0	31 7	
Rhenish Provinces	38 6	33 11	

From the beginning, therefore, to the end of this period, the price of a bushel of barley, upon averages of 14 years each, had fallen from 373 to 328 pennies, or somewhat more than 12 per cent.

In the same manner the average price of Oats has varied unequally in the several provinces during the last two years.

Provinces.	1836	1837
	Sil. gr. pf.	Sil. gr. pf.
Prussia Proper	13 6	14 4
Posen	16 0	16 10
Brandenburg and Pomerania .	19 4	19 3
Silesia	14 1	16 0
Saxony	21 0	19 11
Westphalia	20 7	18 1
Rhenish Provinces	22 0	22 4

Here, also, among the nine periods under consideration, the average price from 1816 to 1829 was the highest in all the provinces: but, on

the other hand, the average from 1824 to 1837, like that of barley, was the lowest in most, but not in all the provinces: for instance, the average price in Brandenburg and Pomerania during 1824-37 was 20 S. gr. 8 pf.; in 1821-34 it was 20 S. gr. 4 pf.; and in the Rhenish provinces it was 22 S. gr. 10 pf. in 1824-37, and 22 S. gr. 5 pf. in 1821-34. Here the exception occurs at the same period, but in two provinces very different in position, population, and trade.

If the average prices of only the first and last of the periods under review be compared, the following will shew the extent of the fall:—

	1816-29	1824-37	
Provinces.	Sil. gr. pf.	Sil. gr. pf.	
Prussia Proper.	17 4	15 7	Average of the whole State. Sil. gr. pf. 1816-29 22 8 1824-37 20 0
Posen	20 2	18 9	
Brandenburg and Pomerania.	22 11	20 8	
Silesia	23 7	19 4	
Saxony	23 9	20 6	
Westphalia.	25 11	22 5	
Rhenish Provinces.	24 10	22 10	

The price, therefore, on an average of 14 years, fell during this period from 27 $\frac{2}{3}$ to 240 pennies. These figures are nearly in the proportion of 17 to 15; the fall, therefore, was two-seventeenths, or $11\frac{1}{7}$ per cent.

If the several kinds of grain be brought together, the fall in the price of each, according to the averages of 14 years, will be as follows:—

Wheat	14 $\frac{1}{2}$ per cent.
Rye	13 $\frac{1}{2}$ "
Barley, rather above 12	"
Oats.	11 $\frac{1}{4}$ "

decreasing, therefore, in a smaller proportion with the less valuable kinds of grain.

This agrees well with the view already pointed out, that an increased production of corn, arising from a better cultivation of the land, is the probable cause of this fall in price, for in an increase of cultivation, attention is mostly turned to the production of those crops which possess the highest value; that is, the cultivation of barley increases more than that of oats,—the cultivation of rye more than that of barley,—and the cultivation of wheat more than that of rye.

The density of the population in the several provinces exercises an undoubted influence on the average prices of corn; but this alone does not determine them, for the different degrees of prosperity, and the proportion of the town population to the total number of inhabitants, influence them materially. The accounts of the density of the population at the beginning of the year 1816 are so little to be depended upon, by reason of the uncertainty attending the population returns then made, that they do not afford grounds for any important deductions. In the year 1820, for the first time, the enumeration was more correct, and therefore the density of the population at the end of that year has been chosen to compare with the last census at present made public, which was taken at the end of the year 1834. According to these accounts, the number of inhabitants to a geographical square mile in the several provinces at the two periods, and the increase during the 15 years, were as follows:—

Provinces.	No. to a Square Mile.		Increase.
	1820	1834	
Prussia Proper	1,461	1,760	299
Posen	1,705	2,089	384
Brandenburg and Pomerania	1,626	1,997	371
Silesia	2,940	3,435	495
Saxony	2,767	3,236	469
Westphalia	3,023	3,514	491
Rhenish Provinces	4,146	4,887	741

According to the census at the end of the year 1834, the following number of persons, out of 100,000 of the total population, were living in cities, amongst which are included all places in the situation of cities, represented as such :—

	Inhabitants.
In Prussia Proper	21,881
Posen	27,079
Brandenburg and Pomerania	37,727
Silesia	20,002
Saxony	35,428
Westphalia	21,436
Rhenish Provinces	26,820

The density, therefore, of the population, was nearly three times as great in the Rhenish provinces in 1820 as it was in Prussia Proper : nevertheless, in the 15 years to 1834 it has increased on an average 741 inhabitants to each square mile, whilst the increase in Prussia Proper during the same period has only been 299, which is at the rate of about two-fifths of the former province.

The density of population, instead of lessening the share of each individual in the produce of the soil, has even increased it here to such an extent, that an influx of new inhabitants could be more easily borne in this province than in the district so much more thinly populated. A greater importance attaches to this fact, because the inhabitants of towns in the Rhenish provinces amount to about one-fourth, and in Prussia Proper to about one-fifth, of the total population ; whilst a much larger proportion of the rural population of the Rhenish provinces live in the prosecution of employments, and in the possession of enjoyments, much more resembling those of residents in a town than many inhabitants of the smaller cities in Prussia Proper. The villages of the Rhenish provinces are full of inhabitants who receive the returns for their labour, not in natural produce, but in gold coin ; and that part of the population which does not itself raise and prepare a supply for their own wants, but have recourse to the markets for it, is much larger here than in Prussia Proper. In consequence, therefore, of all these circumstances, the general average prices of all kinds of grain during the 22 years under review are much higher in the Rhenish provinces than in Prussia Proper, as will be seen in the following table :—

	Rhenish Provinces.	Prussia Proper.
	Per bushel.	Per bushel.
	sil. gr. pf.	sil. gr. pf.
Wheat.	62 0	49 3
Rye	46 6	30 2
Barley	35 5	21 10
Oats	23 3	16 3

Hence, in Prussia Proper, the average price of rye, which is the food most commonly used, was not quite two-thirds of what it was in the Rhenish provinces. A still greater difference existed in the relative prices of barley, which were in the proportion of five to three. The price of oats in Prussia Proper was only about two-thirds of the average in the Rhenish provinces. Of wheat alone has the price in the former province risen to about four-fifths of the average price in the Rhenish provinces; but this was the consequence, at least in some years, of a foreign demand. Generally, however, the average prices of all the four kinds of grain are lower in Prussia Proper than in any other province of the State; in the Rhenish provinces, on the contrary, the prices of wheat, rye, and barley, are the highest; with respect to oats alone, the average price is about half a silver groschen higher in Westphalia than in the Rhenish provinces, which arises from the latter district containing on an average only two-thirds of the number of horses in a square mile which are to be found in Westphalia.

Among the provinces of the vast eastern portion of the Prussian states, Silesia is the most thickly-peopled: still even here the population has increased during the 15 years from 1820 to 1834, on an average, about 495 inhabitants to the square mile. The more thinly-peopled provinces of Prussia Proper, Posen, Brandenburg, and Pomerania, have fallen far short of this increase, and even the manufacturing and prosperous province of Saxony has not quite equalled it. But the average prices of corn in Silesia, during the whole period, were not in proportion higher than might have been expected from these circumstances. They amounted, as has been before shewn, to the following sums in each province:—

	Saxony.	Silesia.	Brandenburg and Pomerania.
	sil. gr. pf.	sil. gr. pf.	sil. gr. pf.
Wheat	50 7	52 7	53 5
Rye	38 3	38 0	36 2
Barley	28 11	29 2	26 10
Oats	21 7	21 7	21 3

The greatest differences between these prices are so small that they can only be considered accidental; there must therefore be circumstances which counteract the influence of the denser population of Silesia, and partly also of Saxony. These may most probably be found in the very different proportion which the town population bears to the total number of inhabitants. According to the foregoing calculation, the number of the town population, out of 100,000 inhabitants, was in the several provinces as follows: Saxony, 35,428; Silesia, 20,002; Brandenburg and Pomerania, 37,727. In Silesia, therefore, only a fifth, while in Saxony considerably above a third, of the total population dwell in towns. It is true, that the province of Saxony contains no city of the size of Breslau, but, on the other hand, it contains, besides Magdeburg (which, in respect of population, even without taking its suburbs into account, contains more than the half of Breslau), Erfurt, and Halle, the population of which exceeds double that of any other city in Silesia, and it has besides many more considerable towns of a middling size than Silesia. In the small towns the condition of the two provinces is not

so different. This preponderance of the middling towns undoubtedly counteracts the influence of the denser population in Silesia.

In the provinces of Brandenburg and Pomerania, above three-eighths of the total population dwell in towns. The cities of Stettin, Frankfurt, and Potsdam, together contain about as many inhabitants as Breslau, and on account of their manufacturing and commercial relations may together consume about the same proportion of food. On the other hand, Berlin alone contains nearly three times as many inhabitants as Breslau, and probably the consumption is also in the same proportion. The middling towns of both provinces may be tolerably alike, both in population and consumption. Stralsund and Brandenburg perhaps exceed Görlitz and Glogau; but, on the other hand, Stargard in Pomerania, Landsberg on the Weser, and Guben, scarcely balance Brieg, Liegnitz, and Grüneberg. In general, however, it can only be the great preponderance of Berlin that can explain how the prices of corn in such thinly-peopled districts as the provinces of Brandenburg and Pomerania, including even their large cities, can very nearly equal the prices in Silesia and Saxony. The influence of great capitals, and particularly of Berlin, upon industry and prosperity, not only in the immediate neighbourhood, but even in districts at a considerable distance, is indeed fully acknowledged by agriculturists and manufacturers, and perhaps even, notwithstanding its great extent, it is over-estimated; but it is still very requisite that, for the administration of the State, and for general knowledge, it should be stated as clearly and distinctly as the wants of both require. An attempt, however, to solve this question, would carry this essay beyond its proper limits.*

R.

* The following information will be useful to those who wish to compare the prices in the above article with those in this country. A Prussian bushel (*scheffel*) = 1.504, or just 14, of an Imperial bushel, and therefore 54 Prussian bushels = 1 Imperial quarter. The average rate of exchange at Dantzic upon London from 1816 to 1837 was sgr. 203½ per pound sterling. Upon these data, wheat at 50. sgr. per Prussian bushel = 11. 6s. 3½d. per Imperial quarter, every additional 5 sgr. per Prussian bushel = 2s. 7½d. per Imperial quarter, and each additional sgr. = 6½d.; so that the average of wheat during the whole period, as shewn in the first table at p. 499, will equal 11. 8s. 3½d. per Imperial quarter. For the use of those who desire to be more exact in the comparison of the several years, the average annual rates of exchange are added. Those from 1816 to 1825 are calculated from returns made by His Majesty's Consul at Dantzic, and the latter have been obtained through the kindness of the Prussian Consul General in London.

Years.	f.	gr.	sgr.
1816	19	21	= 197
1817	18	29	= 189½
1818	18	13	= 184½
1819	19	14	= 194½
1820	20	20	= 206½
1821	21	9	= 213
1822	21	0	= 210
1823	21	8	= 212½
1824	20	15	= 205
1825	20	2	= 200½
Average . . . 201½			

Years.	sgr.
1826	207½
1827	205½
1828	202½
1829	203½
1830	203½
1831	202
1832	206½
1833	207½
1834	205½
1835	206½
1836	203½
1837	203½
1838	203½

Average . . . 204½

A Statement of the Monthly Rates of Exchange, from May 1826 to December 1838, will be furnished in a future Number.

PROCEEDINGS OF STATISTICAL SOCIETIES.

STATISTICAL SOCIETY OF LONDON.

First Ordinary Meeting, Monday, 19th November, 1838.

Lieut.-Colonel SYKES, Vice-President, in the Chair.

A List was read of numerous and valuable Donations to the Library.

The following Members, elect, were formally admitted :—

H. S. Barber, Esq.,	Joseph Marsh, Esq.,
J. B. Herring, Esq.,	Dr. James Kay.

The following Twenty-nine Gentlemen were proposed as Candidates for admission into the Society :—

The Hon. Henry Dunlop, Lord Provost of Glasgow.	William Cargill, Esq., 8, Charlotte-sq., Newcastle.
Sir John Wabham, Bart., Knill-court.	John Alston, Esq., Treasurer of the Blind Asylum, Glasgow.
Ralph Carr, Esq., Hedgeley, Northumberland.	Henry Keyser, Esq., Doughty-street, Mecklenburg-square.
The Rev. George Weight, Trinity-sq., Southwark.	F. S. A. Wansey, Esq., Riches-court, Lime-street.
Thomas Tancred, Esq., West Cowes, Isle of Wight.	John Dillon, Esq., Fore-st., Cripplegate.
Jas. Rob. Spiller, Esq., Director of the Northamptonshire Banking Company	Francis Finch, Esq., M.P.
John Ivatt Briscoe, Esq., M.P.	Rob. Wallace, Esq., Carshalton, Surrey.
James John Adams, Esq., Finsbury-sq.	James Colquhoun, Esq., M.P.
The Rev. W. Dickenson, George-street, Hanover-square.	J. Tulloch, Esq., Direct. of the Guardian Assurance Company.
F. G. Smith, Esq., Sec. Scottish Assurance Company.	Richard Griffiths, Esq., Fitzwilliam-place, Dublin.
Wm. Hen. Charlton, Esq., Hesleyside, Hexham.	Abm. Booth, Esq., Newcastle-st., Strand.
Charles Jellicoe, Esq., 36, Old Jewry.	W. S. B. Woolhouse, Esq., Actuary of the National Loan Company.
L. Hindmarsh, Esq., Alnwick.	Henry Paul, Esq., Baillie of Glasgow.
Anthony Nichol, Esq., Glass Works, Newcastle.	Frederic Hankey, Esq., Lower Berkeley-street, Portman-square.
	James Wyld, Esq., Charing-cross.

The following Candidates were balloted for, and were elected Fellows of the Society :—

Lord James Stuart, M.P.	Sam. Godfrey Hall, Esq., Aldermanbury.
The Rev. Dr. Dillon, Charlotte-street, Pimlico.	Robert George Cecil Fane, Esq., 11, Hereford-street.
Sir Joseph de Courcy Laffan, Bart., Holles-street.	Thomas Bartram, Esq., 26, Bolton-st., Piccadilly.
Lieut.-General Thornton, Park-lane.	John A. Cameron, Esq., Lower Belgrave-place.
The Rev. T. Ormerod, Abergavenny.	Alex. Robertson, Esq., of the National and Provincial Bank of England.
Hugh Wood, Esq., Staples'inn.	
George William Trail, Esq.	

The usual Abstract of the Proceedings of the Statistical Section of the British Association at its last Meeting, was omitted in consequence of the papers then read having already appeared in the Journal.

The Third Report of the Committee, appointed by the Council to Enquire into the State of Education in Westminster, was read (see page 449.) After which was read a Supplement to this Report, exhibiting the

Moral Statistics of the District to which it related, by the Rev. EDGELL WYATT EDGELL, F.S.S. (see page 478.)

The especial thanks of the Meeting were voted to the Education Committee, and to the Rev. Mr. EDGELL.

The Chairman having congratulated the Society on its large accession of new Members, and its prospects of increased stability and usefulness, the Meeting adjourned to Monday the 17th of December.

An Account of the recent Anniversary Meetings of the Statistical Societies of Liverpool, Bristol, and Ulster, is deferred to the next month, on account of the want of space.

An Account of the Quantities of Foreign and Colonial Wheat, and Wheat-Flour, Imported, Paid Duty, and Remaining in Warehouse; and the Monthly Average Prices of British Wheat, in each Month from the passing of the Act 6 Geo. IV. c. 60, on the 15th July, 1828, to the present date.

MONTHS ENDED,	Monthly Average of Prices of British Wheat, regulating the Duty.*	WHEAT.			WHEAT-FLOUR.		
		Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month.	Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month.
1828	<i>s. d.</i>	Imp. Qrs.	Imp. Qrs.	Imp. Qrs.	Cwts.	Cwts.	Cwts.
5th August .	56 2	25,866	6,879	227,273	19,493	9,132	30,979
5th September .	58 0	29,866	4,988	244,614	13,754	2,064	32,236
10th October .	61 0	63,578	22,884	274,597	4,750	1,133	33,536
5th November .	65 1	93,958	1,557	363,210	11,906	1,768	39,949
5th December .	74 1	173,076	432,011	105,045	4,557	31,882	11,236
Total { Foreign .	..	371,380	453,356	..	39,001	30,900	..
	..	14,965	14,965	..	15,462	15,080	..
1829							
5th January .	74 4	196,823	274,745	29,887	11,851	14,956	8,151
5th February .	74 10	318,182	322,546	24,408	37,976	35,889	7,996
5th March .	74 2	114,394	116,008	21,881	96,301	90,025	13,285
10th April .	69 11	110,457	124,003	8,254	28,519	32,726	7,136
5th May .	68 8	83,432	11,516	77,032	44,703	3,723	44,211
5th June .	69 8	140,870	24,754	182,963	68,701	1,771	106,510
5th July .	70 3	154,486	73,260	261,956	30,998	28,764	104,709
5th August .	68 6	273,654	446,178	86,470	37,442	104,939	29,536
5th September .	66 5	171,901	24,715	232,042	52,340	2,366	77,473
10th October .	66 1	130,967	171,550	186,445	36,255	24,908	68,057
5th November .	60 11	58,937	29,377	200,477	7,660	10,289	57,655
5th December .	56 8	22,813	575	203,749	13,325	3,148	57,972
Total { Foreign .	..	1,770,765	1,613,204	..	458,334	346,109	..
	..	6,155	6,029	..	7,742	7,378	..

* These prices are the averages of the aggregate Average Prices of six weeks (by which the Duty is regulated), published during the several months, ending on the first day of each, e. g. 56s. 2d. is the average of the 4 prices published in July, 1828.

MONTHS ENDED,	Monthly Average of Prices of British Wheat, regulating the Duty.	WHEAT-FLOUR.			WHEAT.		
		Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month	Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month.
1830	s. d.	Imp. Qrs.	Imp. Qrs.	Imp. Qrs.	Cwts.	Cwts.	Cwts.
5th January . .	56 8	24,764	1,297	228,653	11,125	322	63,038
5th February . .	56 4	13,594	1,614	239,238	7,310	150	66,962
5th March . . .	56 7	3,613	380	240,640	17,506	71	82,308
10th April . . .	59 0	4,131	238	240,151	28,542	88	105,785
5th May	63 6	46,630	7,754	278,441	33,655	47	136,767
5th June	65 11	247,585	228,895	297,207	100,026	56,733	173,284
5th July	65 9	173,023	23,898	445,707	112,720	2,768	282,419
5th August . . .	68 3	171,660	23,496	588,187	136,573	19,567	375,711
10th September .	72 6	311,517	320,129	582,580	36,151	107,672	313,352
5th October . . .	68 6	355,281	937,988	11,508	56,011	365,103	11,734
5th November . .	62 2	67,802	7,606	51,780	26,861	2,397	24,980
5th December . .	62 5	32,026	2,923	80,560	60,853	1,049	80,721
Total { Foreign . .	..	1,401,386	1,508,390	..	571,347	508,964	..
{ Colonial . . . .	..	50,244	47,833	..	55,991	47,007	..
1831							
5th January . .	65 2	41,025	471	116,718	51,626	517	131,770
5th February . .	68 1	53,136	31,848	138,087	72,265	14,828	189,497
5th March	71 9	20,206	3,364	150,260	70,318	1,119	248,293
10th April	73 2	210,975	356,655	3,163	213,182	453,861	15,241
5th May	71 9	312,992	282,216	32,518	116,137	117,899	14,331
5th June	70 0	374,765	384,554	23,273	256,129	250,645	23,317
5th July	67 6	175,905	78,995	119,075	195,945	96,624	107,274
5th August	66 5	246,256	29,222	326,884	266,685	10,792	353,948
5th September . .	64 8	216,291	9,671	529,129	142,804	15,248	466,042
10th October . . .	63 6	128,308	7,925	642,712	196,623	16,456	640,957
5th November . .	61 9	32,181	11,984	648,968	59,440	16,618	669,131
5th December . .	60 11	37,849	9,065	690,740	29,420	8,592	657,765
Total { Foreign . .	..	1,652,800	1,101,923	..	1,580,687	927,097	..
{ Colonial . . . .	..	197,097	103,451	..	89,891	76,107	..
1832							
5th January . .	61 3	48,407	7,118	710,032	22,795	7,356	666,156
5th February . .	59 6	31,282	8,417	725,410	24,687	9,903	678,052
5th March	59 6	8,963	5,907	742,273	3,561	4,142	663,920
10th April	59 0	1,752	8,961	700,834	16,847	2,029	671,001
5th May	59 7	30,140	10,450	680,712	16,302	6,829	649,177
5th June	61 2	47,868	3,847	693,458	34,082	3,876	667,627
5th July	61 11	37,789	6,696	680,127	26,558	6,282	667,423
5th August	62 9	56,751	31,129	696,921	28,046	15,226	656,216
5th September . .	63 2	84,741	88,732	668,919	33,366	41,454	635,239
10th October . . .	60 2	47,008	123,991	575,297	21,587	49,153	605,086
5th November . .	55 8	23,329	12,345	568,025	4,193	5,998	584,121
5th December . .	52 10	14,848	13,578	562,066	8,389	8,806	565,441
Total { Foreign . .	..	331,725	166,367	..	140,535	56,208	..
{ Colonial . . . .	..	101,157	154,797	..	99,883	104,850	..

MONTHS ENDED,	Monthly Average of Prices of British Wheat, regulating the Duty.	WHEAT.			WHEAT-FLOUR.		
		Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month.	Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month.
1833	<i>s. d.</i>	Imp. Qrs.	Imp. Qrs.	Imp. Qrs.	Cwts.	Cwts.	Cwts.
5th January .	53 8	6,467	11,849	543,947	6,358	4,348	560,028
5th February .	53 6	1,284	6,356	538,317	8,350	3,623	544,143
5th March .	52 10	148	2,064	533,612	10,030	3,979	550,204
10th April .	52 5	1,567	3,069	528,145	8,116	2,147	545,585
5th May .	53 1	3,434	1,106	524,409	467	1,374	527,607
5th June .	53 5	23,510	1,658	536,929	12,704	2,696	502,379
5th July .	53 4	25,433	5,250	557,277	9,915	11,013	484,152
5th August .	53 10	26,072	12,329	570,308	23,762	13,888	481,587
5th September	55 3	37,261	4,961	594,808	12,378	14,002	466,712
10th October .	54 9	70,467	9,088	655,163	28,877	10,816	449,640
5th November .	53 4	20,021	2,757	670,152	20,078	5,674	438,732
5th December .	51 7	23,924	4,454	687,412	18,721	2,118	442,677
Total { Foreign .	..	160,406	974	..	63,564	673	..
Colonial .	..	79,185	63,971	..	96,196	75,009	..
1834							
5th January .	50 4	14,500	3,394	694,082	16,689	4,407	450,073
5th February .	49 3	4,988	2,788	689,094	7,590	6,591	445,824
5th March .	48 10	3,018	3,123	674,990	20,131	6,632	451,377
10th April .	48 3	4,581	2,660	664,579	8,509	3,597	447,692
5th May .	47 5	1,406	1,841	658,346	13,120	4,899	439,803
5th June .	47 10	19,312	2,697	666,606	6,620	5,716	436,753
5th July .	47 7	11,382	3,487	676,360	15,813	5,885	426,053
5th August .	48 5	17,843	7,454	681,311	19,049	10,722	414,650
5th September	48 5	25,512	6,052	678,114	19,330	4,769	415,187
10th October .	46 4	18,510	3,544	670,933	11,653	5,495	395,834
5th November .	42 9	4,391	2,517	668,017	10,616	5,163	387,810
5th December .	41 8	12,095	7,458	662,196	4,463	4,373	378,747
Total { Foreign .	..	91,257	288	..	82,792	85	..
Colonial .	..	46,287	46,731	..	70,794	68,167	..
1835							
5th January .	41 9	8,525	2,249	666,440	12,657	1,881	377,968
5th February .	40 9	4,101	1,064	664,333	1,820	3,300	367,561
5th March .	40 11	2,795	1,262	663,180	5,721	2,130	360,336
10th April .	40 4	1,238	1,319	659,012	6,952	4,344	349,576
5th May .	39 8	2,073	553	647,100	6,498	3,726	345,206
5th June .	39 0	935	1,765	635,269	5,589	1,314	235,014
5th July .	39 9	1,446	1,995	626,895	7,773	1,101	329,535
5th August .	40 10	6,322	2,888	625,621	3,199	2,501	316,712
5th September	42 7	17,165	1,711	628,754	14,215	6,129	313,059
10th October .	40 5	6,574	811	626,389	10,745	7,330	283,416
5th November .	37 8	1,624	1,031	620,364	1,746	4,072	271,279
5th December .	36 9	1,726	1,688	614,754	7,933	3,509	264,056
Total { Foreign .	..	31,478	48	..	59,022	267	..
Colonial .	..	23,052	18,291	..	25,831	41,074	..

MONTHS ENDED,	Monthly Average of Prices of British Wheat, regulating the Duty.	WHEAT.			WHEAT-FLOUR.		
		Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month.	Imported.	Paid Duty.	Remaining in Ware- house at the end of the Month.
1836							
	s. d.	Imp. Qrs.	Imp. Qrs.	Imp. Qrs.	Cwts.	Cwts.	Cwts.
5th January .	36 8	525	244	610,691	11,924	2,724	256,332
5th February .	36 7	1	577	592,596	4,057	1,534	237,684
5th March .	38 8	..	1,277	579,215	3,204	3,088	218,824
10th April .	42 4	..	500	551,526	5,637	1,839	200,524
5th May .	46 0	3,820	1,301	536,164	21,050	2,434	199,556
5th June .	48 6	8,858	621	541,178	29,256	2,466	206,708
5th July .	49 9	24,314	578	561,369	24,290	2,353	204,574
5th August .	50 4	13,733	2,674	568,066	15,651	6,233	188,882
5th September.	49 8	34,535	1,863	594,460	37,313	3,789	193,996
10th October .	48 4	40,620	4,638	585,532	23,159	673	168,654
5th November .	47 10	18,097	1,649	578,659	38,709	7,585	167,440
5th December .	51 1	13,194	2,468	579,784	26,516	1,688	176,118
Total { Foreign .	..	157,176	674	..	215,008	472	..
Colonial.	..	526	17,721	..	25,766	35,944	..
1837							
5th January .	58 10	5,813	2,403	594,239	21,070	3,100	174,898
5th February .	59 4	4,831	1,934	578,828	11,009	194	174,257
5th March .	58 0	10,120	1,538	553,495	21,442	1,608	168,463
10th April .	56 5	9,319	1,973	510,859	38,098	1,594	174,632
5th May .	56 1	11,997	1,656	487,363	13,958	2,124	151,759
5th June .	55 3	49,155	2,201	526,214	46,016	4,332	164,796
5th July .	55 4	83,135	859	607,504	32,601	1,912	172,240
5th August .	56 8	46,484	3,117	649,976	32,490	2,552	179,003
5th September	58 3	70,850	22,240	690,592	33,677	6,541	182,115
10th October .	57 11	105,432	167,773	612,195	38,243	7,663	175,711
5th November .	55 6	30,488	26,840	605,750	24,246	3,428	173,272
5th December .	52 9	13,882	1,082	603,959	21,291	4,394	169,468
Total { Foreign .	..	441,201	210,638	..	278,324	2,225	..
Colonial.	..	310	22,984	..	55,826	37,224	..
1838							
5th January .	53 0	16,672	564	589,459	28,683	3,700	158,605
5th February .	53 0	1,791	376	576,656	12,843	4,176	166,729
5th March .	54 3	984	759	557,801	..	..	..
5th April .	55 6	25	1,081	527,857	..	..	..
5th May .	57 6	1,308	1,549	504,553	17,662	1,122	123,524
10th June .	59 7	25,259	732	527,233	36,102	7,724	113,570
5th July .	62 11	56,952	453	583,236	12,134	1,394	120,517
5th August .	66 7	94,237	6,071	670,154	31,302	12,631	117,027
5th September	70 6	241,237	12,445	874,225	64,806	8,561	159,601
10th October .	71 1	536,647	1,444,670	2,372	100,726	254,930	12,319
5th November .	65 0	24,906	11,194	9,525	12,058	4,564	12,996
*5th December.							
Total { Foreign .							
Colonial.							

* A space is left for the month of December, which will be given in the next Number.

The following Abstract of the preceding Table will shew the Number of Weeks during which each Rate of Duty has been levied in the foregoing period.

Weeks.	Rates. s. d.	Weeks.	Rates. s. d.	Weeks.	Rates. s. d.	Weeks.	Rates. s. d.
21*	1 0	16	23 8	33	33 8	2	42 8
9	2 8	17	24 8	22	34 8	3	43 8
10	6 9	24	25 8	5	35 8	10	44 8
10	10 8	12	26 8	11	36 8	15	45 8
17	13 8	25	27 8	15	37 8	15	46 8
9	16 8	14	28 8	24	38 8	13	47 8
14	18 8	15	29 8	19	39 8	5	48 8
17	20 8	37	30 8	3	40 8	5	49 8
14	21 8	20	31 8	2	41 8	12†	50 8
10	22 8	13	32 8				

Average Prices of Corn per Imperial Quarter in England and Wales, with the Rate of Duty on Foreign Wheat, during each Week of the Month of October 1838.

	Weeks ended October				Average of the Month.
	5th	12th	19th	26th	
	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat—Weekly Average .	64 9	66 0	65 7	66 4	65 8
„ Aggregate Average	66 5	65 0	64 3	64 7	.
„ Duty on Foreign .	20 8	21 8	22 8	22 8	.
Barley	31 11	31 5	30 8	31 1	31 3
Oats	22 9	22 7	22 5	22 4	22 8
Rye	34 4	34 3	34 11	32 9	34 0
Beans	40 1	39 1	39 1	38 10	39 3
Peas	40 0	41 1	40 8	41 2	40 8

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ended 18th September, 16th October, and 16th November, 1838.

Quarters ended	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Ballion.	Total.
18th Sept. .	£. 19,663,000	£. 10,040,000	£. 29,703,000	£. 22,846,000	£. 9,615,000	£. 32,461,000
16th Oct. .	19,359,000	9,337,000	28,696,000	22,015,000	9,437,000	31,452,000
16th Nov. .	18,900,000	8,949,000	27,849,000	21,171,000	9,338,000	30,510,000

Aggregate Amount of Notes circulated in England and Wales, by Private Banks and by Joint Stock Banks and their Branches, respectively, in each of the Quarters ended 30th of June and 29th of September, 1838.

Quarters ended.	Private Banks.	Joint-Stock Banks.	Total.
	£.	£.	£.
June 30th . . .	7,393,247	3,921,039	10,926,511
September 29th .	7,083,811	4,281,151	11,364,962

* Namely, 16 weeks from 13th November 1828 to 5th March 1829; 4 weeks from 18th February to 18th March 1831; 1 week ended 13th September 1838.

† From 6th November 1835 to 7th January 1836.

JOURNAL

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JANUARY, 1899.

A Review of the Trade of France in the year 1837, compared with the preceding year and with the decennial period from 1827 to 1836.
From the Official Report, November, 1838.

THE total commerce of France, with its colonies and foreign countries, during the year 1837, amounted to the sum of 1566 millions of francs (62,640,000*l.*), including imports and exports. Compared with the total amount in 1836 (1867 millions), it exhibits a decrease of 301 millions (12,040,000*l.*), equal to 16 per cent.; but it exceeds the decennial average, from 1827 to 1836, by 200 millions, or 15 per cent.

This difference is to be found principally in the exports, at least as far as the comparison between the years 1836 and 1837 is concerned. On the other hand, the increase upon the decennial period is more particularly to be attributed to the imports. It is also to be remarked that the variations have generally been greater in the "general commerce"* than in the "special commerce," the latter of which shews a decrease of only 9 per cent. in comparison with 1836.

TABLE I.—*Imports and Exports; the Value stated in Thousands of Pounds Sterling.*

		1837	1836	Average of 1827-36	Per-Centage Pro- portion of 1837 to 1836 1827-36	
		£ 1000	£ 1000	£ 1000		
IMPORTS .	{ General Commerce .	32,320	36,240	26,720	-11	+21
	{ Special Commerce .	22,760	22,560	19,200	+1	+19
EXPORTS .	{ General Commerce .	30,320	38,440	27,920	-21	+9
	{ Special Commerce .	20,560	25,160	20,840	-18	-1
IMPORTS & General Commerce .		62,640	74,680	54,640	-16	+15
EXPORTS { Special Commerce .		43,320	47,720	40,040	-9	+8

With respect to the mode in which the merchandize is transported, the total commerce during 1837 is distributed between the two great divisions of commerce by land and commerce by sea, in the proportion of 32 to 68. These two distinct branches bore to one another in 1836

* *General Commerce* is the term applied in the French official tables to Importations, as regards the trade inwards, and to Exportations of foreign and French merchandize, as regards the trade outwards. *Special Commerce* is limited to merchandize entered for home consumption, inwards, and to exportations of French merchandize, outwards.

the proportion of 31 to 69, and on the decennial average the proportion of 30 to 70. Both comparisons exhibit a larger proportionate share of commerce by land than of commerce by sea during the year 1837. Considered separately, the commerce by land has fallen off 12 per cent. in comparison with 1836, but has exceeded the decennial average by 21 per cent. It appears, upon an examination of the variations in the commerce by sea, that the comparison with 1836 shews a greater decrease in the trade carried on in foreign vessels than in that carried on in French vessels, being 8 per cent. in the former and 25 per cent. in the latter branch. This difference is particularly remarkable in the value of exports; it amounted to 39 per cent. for exports under a foreign flag, and only to 9 per cent. for those under a French flag. In comparison with the decennial period, the commerce by sea exhibits, in 1837, an increase in almost all its branches. The increase in the value of imports by foreign vessels is 38 per cent., while those by French vessels have increased only 10 per cent.

The following table shews the proportions in which French and foreign vessels have respectively shared in the commerce during the same periods.

TABLE II.—*Navigation Inwards and Outwards united.*

	Per-Centage Proportion			1837 compared with	
	In 1837	In 1836	In 1827-36	1836	1827-36
French vessels	40.	38.	39.	+ 6 p. cent.	+ 35 p. cent.
Foreign ditto .	60.	62.	61.	+ 2 „	+ 36 „

It results from the above statement, from which vessels in ballast are excluded, that although, as has been shewn, the value of the commerce by sea was less in 1837 than in 1836, the navigation, on the other hand, exhibits an increase. It appears also, on a comparison of the two years, that the increase has been relatively greater upon French than upon foreign vessels. A comparison of 1837 with the decennial average shews a difference, in favour of that year, of about 35 per cent., both upon French and foreign tonnage.

From an examination of the commerce carried on in French vessels with the colonies, the deep fisheries, and with foreign countries, the following facts are elicited :—

1. As regards the French colonies, the value of imports was 11 per cent. less than in 1836, and the same amount less than the decennial average.

2. The value of exports to the colonies, on the other hand, was in both cases in favour of 1837, the excess over 1836 being 6 per cent., and over the decennial average 14 per cent.

3. The imports of the productions of the deep fisheries, in 1837, whether compared with 1836 or with the decennial average, have increased to the extent of 71 per cent.

4. Lastly, if the united imports and exports during 1837, in the trade carried on under the French flag with foreign countries, present a

diminution of 11 per cent. when compared with 1836, they exhibit a corresponding increase when compared with the decennial average.

The next tables in the Report refer to the trade with each country, and suggest the following remarks:—

First, with respect to *Imports*, the value of merchandize imported from the United States amounted in 1837 to 4,720,000*l.*, and the value entered for home consumption to 3,480,000*l.*, shewing an excess of 6 and 7 per cent. respectively, when compared with 1836, and of 40 and 36 per cent., when compared with the decennial average.

The importations from Great Britain and the Sardinian States have also increased considerably. The value of merchandize from the former kingdom entered for consumption exceeded the amount in 1836 by 37 per cent., and the decennial average by 118 per cent. Compared with the preceding year, the importations from Belgium have varied slightly, but the increase upon the decennial average amounts to more than a fifth. The trade with Holland has greatly increased as regards both the quantities entered for consumption and those destined for re-exportation and transit. Among the countries the imports from which, in 1837, exhibit a diminution when compared with 1836, both with respect to the general and the special commerce, are included Switzerland, Germany, the Hanse Towns, Prussia, Austria, the Barbary States, the two Sicilies, Egypt, and Tuscany.

Secondly, with regard to *Exports*, the trade with the United States fell off greatly in 1837 compared with 1836. The total exports of French and foreign merchandize to that country amounted to 3,960,000*l.*, of which only 2,320,000*l.* consisted of French productions. The decrease, as compared with 1836, was 64 per cent. of French merchandize alone, and 58 per cent. inclusive of foreign merchandize. Compared with the decennial average, a decrease has also taken place, but not to so great an extent, being 38 and 18 per cent. respectively.

The exports to England, both of French and foreign merchandize, have fallen off in comparison with either period. The contrary, however, is the case in the trade with Belgium, the Sardinian States, Switzerland, and Holland. With respect to other foreign countries, the exports of French merchandize had increased in 1837, compared with 1836, in the trade with all the French colonies except Guadaloupe; with Greece, Algiers, the Mauritius, the Coast of Africa, Dutch East Indies, Danish Possessions in America, Peru, and Bolivia; and had decreased, on the other hand, in the trade with Spain, Turkey, the British East Indies, Prussia, Brazil, two Sicilies, Austria, Egypt, Haiti, Chili, Barbary States, and Portugal.

Imports and Exports united.—In the total commerce, including imports and exports, the United States continues to hold the first place as regards both the general and special commerce, although the amount in 1837 has greatly fallen short of that during the preceding year. Great Britain, which comes next in order, has taken the second place in the special commerce, which was occupied by Belgium in 1836. Its trade exhibits in this branch an increase of 10 per cent. upon 1836, and of 28 per cent. upon the decennial average; and it is to be remarked that this country has been the principal market for French exports in the year 1837. The Sardinian States and Belgium figure next in the

tables, but in a different order; the former country, which ranks third in the general commerce, occupies the fourth place in the special commerce, and Belgium *vice versa*. The latter country exhibits but a slight variation in comparison with 1836. The Sardinian States, on the contrary, present a large increase, amounting to 23 per cent. in the general commerce and 10 per cent in the special commerce.

The tables in the French Report which exhibit the above facts do not admit of being transcribed at length, but the following abstracts will shew the points most worthy of observation.

TABLE III.—*Shewing in their respective order the Twelve Countries which carried on the greatest Amount of Trade with France in the Year 1837.*

Countries.	General Commerce.			Special Commerce.		
	Total.	Imports.	Exports of French and Foreign Merchandise.	Total.	Entries for Home Consumption.	Exports of French Merchandise.
United States . .	1	1	1	1	1	2
Great Britain . .	2	4	2	2	4	1
Sardinian States .	3	3	5	4	3	6
Belgium	4	2	6	3	2	4
Switzerland . . .	5	5	3	7	9	5
Spain	6	7	4	5	5	3
Germany	7	6	7	6	7	7
Russia	8	9	14	10	10	15
Guadaloupe . . .	9	13	10	8	8	8
Brazil	10	20	8	18	21	12
Turkey	11	10	18	17	13	21
Martinico	12	16	13	9	15	9

TABLE IV.—*Shewing the Amount of Imports and Exports to and from the Twelve Countries carrying on the greatest Amount of Trade with France in 1837, stated in Thousands of Pounds Sterling.*

Countries.	General Commerce.		Special Commerce.	
	Imports.	Exports of French and Foreign Merchandise.	Entries for Home Consumption.	Exports of French Merchandise.
	£1000.	£1000.	£1000.	£1000.
United States	4,720	3,960	3,480	2,320
Great Britain	3,040	3,800	1,920	2,520
Sardinian States	3,400	2,240	2,600	1,320
Belgium	3,440	1,880	2,880	1,520
Switzerland	2,200	3,080	720	1,360
Spain	1,440	2,800	1,080	1,800
Germany	1,760	1,410	840	1,280
Russia	920	560	640	360
Guadaloupe	680	720	760	720
Brazil	440	880	240	520
Turkey	840	440	520	240
Martinico	560	680	480	630

On comparing the imports of 1837 with those of 1836, separated in the three classes into which they are usually divided, viz., raw materials of manufactures, articles for use or consumption unmanufactured, and manufactured, it will be seen that the decrease has occurred as well among the first as among the two latter branches of trade; but that, with respect to merchandize destined for consumption, there has been no decrease, except among unmanufactured articles for use or consumption, which have fallen off 1 per cent. It is in the latter branch alone that a diminution has occurred in the comparison with the decennial period, amounting to 13 per cent.; in the other branches there has been a large increase.

TABLE V.—Imports classed according to their nature, stated in Thousands of Pounds Sterling.

	1837	1836	1827-36	1837 Compared with	
				1836	1827-36
GENERAL COMMERCE.	£1000.	£1000.	£1000.		
Raw Materials of Manufactures	20,120	21,240	16,080	— 6	+25
Articles fit for					
Use or Consumption, { Unmanufactured	5,920	7,120	6,560	—20	—13
{ Manufactured	6,280	7,880	4,040	—17	+61
Total	32,320	36,240	26,680	—11	+21
SPECIAL COMMERCE.					
Raw Materials of Manufactures	16,040	15,840	12,640	+ 2	+22
Articles fit for					
Use or Consumption, { Unmanufactured	4,600	4,640	5,120	— 1	—13
{ Manufactured	2,120	2,080	1,440	+ 1	+56
Total	22,760	22,560	19,200	— 1	+18

If, upon analysing these three great divisions, as has been done in the French tables, the several articles be examined with the view of discovering those which have experienced the greatest variation in 1837, it will be found that, excluding such articles as from their nature are only of secondary importance, the greatest fluctuation has occurred in those comprised in the following table.—See Table VI. p. 518.

Upon comparing the exports of 1837 with those of 1836, divided into the two main classes of raw produce and manufactures, it appears that the decrease which occurred in the former year was relatively greater in articles of raw produce than in manufactures. The export of the former fell off 21 per cent., as well in the general as in the special commerce. The decrease in the latter was 18 per cent. upon the general, and 11 per cent. upon the special commerce. Compared with the decennial average, the results are generally in favour of 1837; the sole exception being the exports of manufactures, which have fallen off 3 per cent.—See Table VII. p. 518.

TABLE VI.—Principal Articles of Import in which the greatest Fluctuation occurred in 1837.

General Commerce (Imports.)		Per-centage Difference of 1837, compared with	
		1836	1827-36
Increase in 1837 . . .	Linen thread . . .	24	84
	Ditto cloths . . .	..	16
	Woollen cloths . . .	44	89
	Cotton, raw . . .	..	36
	Sugar, foreign . . .	2	13
	Coals . . .	17	77
	Tallow . . .	207	139
	Tin . . .	58	46
Decrease in 1837 . . .	Tobacco, raw . . .	22	63
	Sugar, French colonial . . .	16	15
	Silk goods . . .	50	..
	Wool, sheep's . . .	39	..
	Corn . . .	51	47
	Cattle . . .	15	27
	Lead . . .	42	15
	Potash . . .	25	16
Special Commerce (Entries for Consumption.)			
Increase in 1837 . . .	Silk, raw and thrown . . .	21	25
	Coals . . .	14	67
	Linen thread . . .	22	62
	Tobacco, raw . . .	96	132
	Coffee . . .	7	16
	Horses . . .	19	52
	Corn . . .	32	..
	Silk goods . . .	38	82
	Tallow . . .	144	144
	Tin . . .	48	48
Decrease in 1837 . . .	Cocoa . . .	30	86
	Cattle . . .	14	27
	Potash . . .	11	17
	Lead . . .	23	12
	Corn . . .	..	75
	Tea . . .	33	14

TABLE VII.—Exports classed according to their nature, stated in Thousands of Pounds Sterling.

	1837	1830	1827-36	1837 Compared with	
				1830	1827-36
GENERAL COMMERCE.					
	£1000.	£1000.	£1000.		
Raw Produce	10,680	12,960	10,160	-18	+ 5
Manufactures.	19,640	25,480	17,760	-21	+11
Total	30,320	38,440	27,920	-21	+ 9
SPECIAL COMMERCE.					
Raw Produce	6,120	6,880	5,920	-11	+ 3
Manufactures	14,440	18,280	14,920	-21	- 3
Total	20,560	25,160	20,840	-18	- 1

The following table exhibits the variations of the principal exports in 1837, in a similar manner to that of Imports, marked No. VI.

TABLE VIII.—*Principal Articles of Export in which the greatest fluctuation occurred in 1837.*

General Commerce (French and Foreign Merchandize).		Per-Centage Difference of 1837 compared with	
		1836	1827-36
Increase in 1837	Cotton cloths	42	42
	Woollen ditto	47	47
	Clocks and watches	56	56
	Articles of fashion (modes)	72	72
	Machinery	44	144
Decrease in 1837	Silk goods	41	16
	Wine	15	7
	Linen cloths	21	12
	Silk, raw and thrown	33	17
	Parisian manufactures	45	11
	Sugar, refined	24	6
Special Commerce (French Merchandize).			
Increase in 1837	Cotton cloths	21	21
	Woollen ditto	28	28
	Articles of fashion (modes)	48	48
	Plated wares	5	34
	Machinery	38	120
Decrease in 1837	Silk goods	36	26
	Wine	15	7
	Linen cloths	31	35
	Brandy	8	23
	Skins, dressed	32	7
	Parisian manufactures	45	12
	Sugar, refined	44	38

The next tables in the official report relate to the transit trade, shewing, first, the several classes of merchandize, and, secondly, the countries with which the trade was carried on. The first table is divided into two parts, one exhibiting the value, and the other the weight of the merchandize. The average period which serves for the point of comparison consists, in the table of goods, of the five years anterior to 1837, and in the table of countries, of the four years preceding the same date.

With reference to the value of the merchandize, the transit trade amounted in 1837 to 5,840,000*l*. Compared with 1836, it exhibits a decrease of 29 per cent.; but, compared with the quinquennial average, an increase of 7 per cent. The principal articles in which an increase has occurred are, refined sugar, iron, and steel; those in which the trade has decreased are, sheep's wool, silk goods, indigo, and clock-work.

With respect to the weight of the merchandize, amounting in 1837 to 302,294 metrical quintals,* the trade in 1837 shews a decrease of 11 per cent. below that of 1836, and an increase of 33 per cent. above that of the quinquennial period. Comparing the several articles in 1837 with those in 1836, there appears an increase of 130 per cent. in the trade of refined sugar, and a decrease of 53 per cent. in that of silk goods; 47 per cent. in sheep's wool, 45 per cent. in indigo, 39 per cent. in raw and thrown silk, and 28 per cent. in iron and steel. Comparing the same with the average of five years, there appears an increase of 293 per cent. upon refined sugar, 40 per cent. upon cotton, 36 per cent.

* Equal to 29,689 tons; one ton = 10 $\frac{1}{2}$ metrical quintals.

upon clock-work, and 29 per cent. upon raw and clayed sugars; and a decrease of 58 per cent. upon sheep's wool, 25 per cent. upon indigo, and 14 per cent. upon silk goods.

The principal variations exhibited by the transit trade of 1837, in comparison with 1836, considered with reference to the several countries interested in it, are a decrease of 54 per cent. in the trade with the Sardinian States, of 48 per cent. in that with Prussia, and of 35 per cent. in that with Switzerland; while, in comparison with the average of four years, there was an increase of 26 per cent. in the trade with Switzerland, and of 47 per cent. in that with the Sardinian States.

As regards the destination of the merchandize in the transit trade, the principal variations consist of an increase in the commerce with Belgium, and a decrease in that with the United States and Great Britain. With respect to the first of these countries the increase was 11 per cent. compared with 1836, and 35 per cent. compared with the quadrennial average. The decrease in the trade with the United States was 54 per cent. in the first period, and 22 per cent. in the second; and the decrease in the trade with Great Britain was 39 per cent. compared with 1836, and 20 per cent. compared with the average of the four years.

TABLE IX.—*Transit Table, shewing the nature of the Articles, the value stated in Thousands of Pounds Sterling.*

	1837		Quantities in 1837 compared with		Value in 1837 compared with	
	Quantities.	Value.	1836	1833-37	1836	1833-37
	Metricul Quintals.	£1000.				
Cotton, raw	61,898	496	-10	+40	-53	-14
Refined sugar	40,499	160	+130	+293	-9	+49
Iron and steel	37,180	68	-28	+27	-39	-19
Coffee	36,665	148	+4	+20	+4	+27
Sugar, raw and clayed .	15,878	68	-7	+29	-9	+41
Cotton cloths	8,052	992	-22	+28	-22	+10
Silk, raw and thrown .	6,849	912	-39	-13	+90	+233
Linen cloths	5,763	364	-15	+13	-12	+3
Woollen cloths	4,992	584	+9	+29	-20	+55
Clock-work	2,373	112	+1	+36	-45	-26
Silk goods	2,331	1,064	-53	-14	-6	+31
Sheep's wool	1,294	20	-47	-58	+89	+70
Indigo	837	68	-45	-25	-7	-13
Cochineal	426	52	-12	-14	-50	-58
Other articles	77,257	732	-27	+13	-29	-2
Total	302,294	5,840	-11	+33	-29	+7

The trade of the several warehousing ports is shewn in Table XI. p. 521, exhibiting the weight and value of the merchandize in bond.

From this it will be seen that the total value of goods warehoused in all the ports of the kingdom amounted to 19,172,000*l.* in the year 1837. Between this sum and 19,988,000*l.*, which was the value of warehoused goods in 1836, there exists only the trifling difference of

4 per cent. Compared with the triennial average from 1834 to 1836, for which alone the data are complete, there is scarcely any difference, the amount in the latter period being 19,000,000*l*.

The ports of Calais, Paris (Swan Island), Strasburg, Toulouse, Metz, Bayonne, Lyons, and Orleans, are those in which the comparison, both with 1836 and 1834-36, exhibits the greatest variations in the amount of bonded goods.

With respect to the weight of the merchandize, the trade in 1837 exhibits but little difference compared with 1836.

TABLE X.—*Transit Trade, shewing the Trade with the principal Countries, the Value stated in Thousands of Pounds Sterling.*

Countries from which Imported.	Value in 1837	1837 compared with		Countries to which Exported.	Value in 1837	1837 compared with	
	£1000.	1836	1833-6		£1000.	1836	1833-6
Switzerland . .	1656	-35	+26	Switzerland . .	1720	-7	+17
Great Britain . .	836	-5	+8	United States . .	1172	-54	-22
Sardinian States	700	-54	-47	Great Britain . .	976	-39	-20
Germany . . .	604	+7	+5	Spain . . .	528	-11	+11
Belgium . . .	540	-8	-15	Sardinian States	292	-15	-15
United States . .	468	-12	+11	Belgium . . .	244	+11	+35
Prussia . . .	460	-48	+13	Brazil . . .	212	-18	+8
Other Countries	640	+2	+26	Other Countries	760	-2	+32
Total . .	5904	-28	-1	Total . .	5904	-28	-1

TABLE XI.—*Weight and Value of Merchandize bonded in the principal warehousing Ports of France during the Year 1837, the Value stated in Thousands of Pounds Sterling.*

	1837		Quantities in 1837 compared with		Value in 1837 compared with	
	Quantities.	Value.	1836	1834-36	1836	1834-36
	Metrical Quintals.	£1000.				
Marseilles . .	2,359,526	6,172	- 7	+13	- 2	+ 9
Havre . . .	1,252,581	5,804	-11	- 2	- 3	+ 2
Bordeaux . . .	475,066	2,164	+ 6	+22	-12	- 3
Paris (Marais) . .	208,384	852	- 5	+20	+28	- 5
Rouen . . .	193,890	404	-19	+3	-20	..
Dunkirk . . .	175,081	224	+34	+13	- 6	- 2
Paris (Swan Island)	88,050	136	-26	-29	-17	- 8
Nantes . . .	86,341	608	-61	-61	-31	-14
Bayonne . . .	54,090	288	+4	+29	-7	+4
Calais . . .	39,343	48	+75	+77	-51	-56
Lyons . . .	23,707	1,780	-20	-11	+47	+57
Toulouse . . .	9,013	72	-26	-26	-18	-38
Strasburg . . .	8,463	88	-10	-1	-57	-76
Orleans . . .	6,474	20	+62	+66	-33	-11
Metz . . .	4,002	32	-14	+15	+25	+25
Other Ports . .	863,788	480	+85	+186	+20	+45
Total . .	5,847,789*	19,172	-1	+16	-4	..

* Equal to 574,336 tons.

But this weight, which amounted to 5,847,789 metrical quintals, exceeded the average of 1834-36 by 16 per cent. The principal variations were at Calais, Orleans, and Dunkirk, at which an increase occurred; and at Nantes, Paris (Swan Island), and Toulouse, at which there was a decrease.

The ports of Marseilles and Havre have maintained their relative importance. These two ports have received more than two-thirds of the whole of the merchandize bonded in the kingdom during the year 1837, the former to the extent of 40 per cent., and the latter to that of 21 per cent.

R.

An Account of the Trade of the Port of Dundee, during the three years ended 31st May, 1838. By JOHN STURROCK, Esq., Banker, and Convener of the Finance Committee of the Harbour Trustees, Dundee. Communicated by JOSEPH HUME, Esq., M.P.*

THE commercial crisis, which commenced in October, 1836, and which extended over Great Britain, Ireland, and the Continents of Europe and America, was severely felt in Dundee. Its injurious effects were aggravated by the circumstance, that during the year from 1st June, 1836, to 31st May, 1837, an excessive importation of flax and flax codilla, the raw materials from which the greater part of our exports is manufactured, took place. The flax imported in that year was 22,461 tons, while the average of the four preceding years ended 31st May, 1836, was 15,726 tons, shewing an excess of 6,735 tons. In the same manner, the importation of flax codilla being 8,279 tons, exceeded by 3,405 tons the average of the four preceding years, which was 4,874 tons. The consequence was—a great part being held by persons who were dependent upon credit—that the prices fell in a double ratio; first, from the check given to credit; and secondly, from the importations being greater than the trade of the place required. Hence D. C. flax—of which a greater quantity is consumed than any other—which in June, 1836, was worth 42*l.* 15*s.*, had fallen to 33*l.* in July, 1837; and flax codilla fell, during the same period, from 21*l.* 15*s.*, to 17*l.* per ton. Therefore, although the average quantity of flax imported during the three years ended 31st May, 1838, only exceeds the average of the four years ended 31st May, 1836, by 1,845 tons, the former being 17,571, the latter 15,726; and the average of the flax codilla, for the same period, only exceeds by 944 tons, the average for the three years being 5,818, and of the four years 4,874 tons; yet we see the injurious results arising from the excessive importations from the 1st June, 1836, to 31st May, 1837, amounting to 30,740 tons—the price of the whole being affected according as the excess bears a greater or less ratio to the actual quantities required for consumption.

The fluctuation in the quantities of English and Scotch coals imported is worthy of remark. The importation of the former, during the last

*The above Report suggests the advantage of similar statements for other commercial and manufacturing towns. A comparison of such documents would tend to remove much of the doubt and obscurity under which commercial operations are too often carried on. It would be impossible to prepare a form for general application; but every person may readily select the facts which best display the condition and prospects of the trade of his own town. If any such reports already exist, or may in future be prepared, the Editor will feel obliged for information thereof, or for a copy of the document,—Ed.

three years, has been increasing, while that of the latter has been regularly decreasing; and this is attributable to the attempts made by the proprietors of the Scotch mines to increase their price, which forced the flax-spinners, and other consumers, to have recourse to the use of English coals, instead of confining themselves to the use of the Scotch. Probably, from the reduction in the price of coals made by the owners of the Scotch mines, the quantity of Scotch coals consumed may again exceed, as it did in all former years, the quantity of English coals used.

On an inspection of the exports, the most gratifying conclusions are to be drawn from the returns of the sheetings, dowlas, sacking, and sail-cloth exported. The quantities of the three first-mentioned articles have regularly increased; and though the last year of the latter article falls short of the first year by 4,492 pieces, yet it exceeds the year 1836 by 21,199 pieces.

The most important and valuable article of our trade are sheetings. Their value, during the three years, amounts to a third of the whole exports; and, as half of the quantity is said to be used in home consumption, the trade is of the best and surest kind, and the most likely to continue to increase.

The next is dowlas, of which three-fourths are reported to be exported; then follows sail-cloth, half of which is exported; and thereafter sacking, of which two-thirds are supposed to be used for home consumption.

The article of Osnaburgs forms a considerable part of our exports, but seems liable to great fluctuations, as the average number of pieces exported during the last three years is only 81,967; while that of the three years ended 31st May, 1835, was 120,754. This probably arises from nine-tenths of the article being exported, and, from the difficulties which the exporters experience, from imperfect information, in regulating the supply to the demand. Whether the great change which has taken place in our colonies, by the complete emancipation of the negroes, whose clothing was generally made of this article, will influence this manufacture, can only be ascertained by time. Conjecturing that free labour will not only improve the state of the proprietors, but of the labourer, we may anticipate an increase.

Years ended.	Cotton Bagging exported.	Aggregate of each Three Years.	Yearly Average of the Three Years.
	Pieces.		
May 31, 1827	44,777	168,611	56,203
" 1828	63,865		
" 1829	59,969		
" 1830	63,383	178,011	59,337
" 1831	65,592		
" 1832	49,036		
" 1833	27,179	137,858	45,952
" 1834	30,521		
" 1835	80,158		
" 1836	159,494	262,359	87,453
" 1837	79,649		
" 1838	23,216		
Total. .	746,839	746,839	62,236

The value of cotton bagging, of which nineteen-twentieths are reckoned to be exported, exceeds that of several of the articles enumerated; but the remarkable circumstances attending the exportation of this commodity during the last twelve years require to be particularly considered. On reference to the return of cotton bagging, it will be found that the number of pieces exported in the twelve years from 1st June, 1826, to 31st May, 1838, is 746,839, making an annual average of 62,236. The average of the three years ended the 31st May, 1829, is 56,203; of the three years ended the 31st May, 1832, is 59,337; of the three years ended the 31st May, 1835, is 45,952; and of the three years ended the 31st May, 1838, is 87,453.

During the first six years of this period, the difference of the annual number of pieces exported was not very great, and the profits of the trade were fair. During the next three years the exportation, as a whole, was moderate, particularly in the two first years, when great profits were realized. This led to an excessive and foolish exportation in the year ended 31st May, 1836, when no less than 159,494 pieces were sent from this port, exceeding the exportation of the whole three years ended 31st May, 1835, by no less than 21,636 pieces.

The crop of American cotton this year, one of the greatest they have ever had, is estimated at 1,700,000 bales, which, allowing a piece of bagging to pack 11 bales, will consume 154,500 pieces. As the Americans themselves furnish one-half of this quantity, the exportation of 1836 was equal to two years' consumption. Hence, although a part of that year's exportation may have been sold at a profit, its ultimate effects, followed by the commercial crisis which took place in the same year, were to depress the prices and to render the speculations ruinous. The same results which followed the excessive importation of flax have therefore taken place, and before the trade will furnish profits, it will be necessary that more attention be paid to proportion the supply to the demand.

It is gratifying to turn from recording the disastrous effects resulting from the excessive importation of flax, &c., in 1836-7, and the still more excessive exportation of cotton bagging in 1835-6, to the contemplation of a new trade which, we trust, is still in its infancy, and which, in extent, may soon rival that with America. France, by its population, soil, and climate, possesses the elements requisite to render it a great agricultural and commercial nation. Hence, were we allowed freely to exchange our commodities with that country, it is probable that the French would become the best customers of Great Britain. Of late years, the duties on French wines have been reduced to the same standard as those upon the wines of other countries; but the duty on their brandies is still excessive, which not only gives rise to a great contraband trade, but continues to foster that inimical spirit which, unfortunately for the prosperity of both nations, has so long existed. If, therefore, the duty on brandy were reduced, and the experiment made to admit their low-priced wines at an *ad-valorem* duty, it would generate so good a feeling as would much promote the intercourse between the countries, and consequently lead to the increase of trade.

It is impossible to ascertain, previously to vessels going direct to France, the extent of this trade; but the annexed table shews the quantity of goods directly exported for eight months of this year, from Febru-

ary to September, inclusive. The estimated value, during the first four months, is 32,897*l.*; during the second four months, 47,849*l.*; together, 80,746*l.* Hence the whole year may be taken at 121,119*l.* But if we consider that considerable quantities have gone indirectly, and will still be sent by way of Hull and London, the extent of this year's trade may be estimated at 150,000*l.*, being an eighth part of the manufactured articles exported in the year ended 31st May, 1838.

Quantities exported from Dundee to France, from 1st February to 30th September, 1838.

	Osnaburgs.	Sheetings.	Dowlas.	Flax Yarn.	Tow Yarn.	Value.
	Pieces.	Pieces.	Pieces.	Cwts.	Cwts.	£.
February to May	90	502	2391	2836	4022	32,897
June to Sept.	92	1286	3430	5365	3620	47,849
	182	1788	6321	8201	7642	80,746

Were the corn-laws so modified, that wheat, with other grain in a similar proportion, could be imported during five years, from January next, at a duty of 10*s.* per quarter, thereafter to be annually reduced 1*s.* per quarter, till the duty was as low as 5*s.*, then to remain for five years at this sum, and afterwards to be decreased, by 1*s.* annually, till it reached 2*s.* per quarter, at which it should remain, rather for the purpose of ascertaining the quantity imported than for raising a revenue, it is probable that the continental nations, and especially America, would cease to turn their attention to manufactures. They would exchange their raw products for our manufactures, and the exchange would be beneficial to all parties. They buy from us, and we buy from them, not from any affection, but because the commodities which each has for sale are produced at the lowest price; and to affect such purchase is the constant aim of all merchants.

The effects of our present corn-laws are, that we cannot purchase their corn, and we are driving them to become manufacturers. As it is contraband to export machinery, they cannot buy it without paying an exorbitant price—15 per cent. more than the regular charge being known to have been offered in this place to land it in Belgium. Hence, as the machinery cannot be exported, the *heads* are emigrating who will make the machinery; and who will carry with them all the capital they can command; and our landed proprietors too late will find that the prosperity of agriculture depends upon the prosperity of the manufacturers—upon their power of producing commodities, and exchanging them for the raw products of the agriculturists. For, by the increase of the trade and manufactures of Scotland, since the termination of the war with our American Colonies, the agricultural produce has been, from improved cultivation and an increased demand from a growing population engaged in manufactures, so much increased, that the horses employed in agriculture, and conveying the commodities produced by the manufacturers, now consume more corn than the whole produce which, previously to that period, was raised.

For a long period, the writer of these notes has been convinced that the price of corn depends, not upon corn-laws, but upon the seasons—upon the variation of produce raised in good and bad years, from the same quantity of acres, which fluctuates so much as to render it

impossible, by any importation to make up the deficiency between a good and bad crop, and thus seriously to affect the price. He has been much gratified by the manner in which Mr. Tooke, in his late publication on prices, has proved this fact by his investigations of the prices of corn for a long series of years. Hence the suggestion of a gradual modification of the corn-laws, by which the duty being reduced to its minimum only at the end of eighteen years, the interests, or rather the imaginary interests, of the landlord and tenant, would be equally protected.*

From the table of the registered shipping of the port, it appears that on the 31st December, 1837, the number of vessels was 318, and their tonnage 41,750. From this sum—subtracting the tonnage of the three steamers employed in the London trade, which, after the deduction made for the space occupied by their machinery, are reckoned at 1,200 tons—there would remain 40,550 tons, which, at 10*l.* per ton would make the value of the shipping 405,500*l.* Adding 64,000*l.*, the cost of the steamers, the capital at present employed in the shipping trade will be 469,500*l.*; and, as an increase of 4,000 tons is expected, from the vessels already registered, to be made to the tonnage of the port by the 31st December next, the value of the shipping will then be 509,500*l.*

During the last three years, whilst other branches of trade have been far from yielding profits, the returns from shipping have been very fair. Hence the increase in the number of vessels, which are still said to be insufficient for the trade of the place. In the year 1792 the shipping of the port was 116 vessels, whose tonnage was 8,550. In January, 1815, the number of vessels was 157, and their tonnage 15,275—an addition of 6,725 tons, or 78½ per cent., in 23 years. In 1822 the vessels had increased to 158, and the tonnage to 16,572, having thus nearly doubled in a period of 30 years. In the next seven years, to 1829, the number of vessels had risen to 225, and their tonnage to 27,150—an increase of about 63½ per cent. The number of vessels in 1833 had increased to 284, and the tonnage to 36,473—an addition of 34½ per cent. in four years. Whilst the increase during the four years to 1837 is only 14½ per cent., the addition for this year will probably be at the rate of 9½ per cent.

From the constant increase of shipping, we may therefore reasonably infer that this important branch of our trade has been lucrative, and has added, considerably, since the period first mentioned, to the wealth of the place. But the most important fact, which proves the blessings of peace, is, that during a period of 23 years, from 1792 to 1815, the increase in the number of our ships was only 41, and of the tonnage 6,725, being 78½ per cent.; whilst in the 24 years, from 1815 to 1838, both inclusive, the increase in the number of ships, supposing 15 to be added this year, is 176, and of the tonnage, 29,475 tons, being 193 per cent. on the tonnage of 1815, and more than four times the increase from 1792 to 1815. During this last-mentioned period, we were engaged in a most expensive war, and Dundee, from supplying the navy with

* The bad harvest of 1816 is computed only to have produced 9,000,000 of quarters; the abundant one of 1820 yielded 16,000,000—a difference of 7,000,000 of quarters. To import such a quantity would require 5384 vessels, of 200 tons burden each, or 24 times all the vessels belonging to this port. Were it possible to buy the corn in the Baltic, it would take our whole shipping *six years* to import it—each vessel making four voyages in the year.

canvas, was emphatically called a *war town*, and therefore gloomy forebodings for our trade were anticipated from the cessation of the war expenditure. But the progress of our shipping, and of our trade, and the state of the empire generally, have proved that the comforts of society, and the interests of humanity, are best promoted by the blessings of peace.

Registered Shipping belonging to Dundee in each year.

Date.	No. of Vessels.	Tonnage.
December 31, 1835	309	39,402
„ 1836	318	41,505
„ 1837	318	41,760

On taking a general view of the trade during the three years ended 31st May, 1838, it appears that the value of the articles imported, and principally used in our manufactures, amounts to 3,284,585*l.*, and that the value of the articles exported in the same period is 4,108,970*l.* This leaves a surplus of 824,385*l.*, being a little more than 25 per cent. on the imported value. But as, taking one manufacture with another, the expense of the labour added to the value of the raw material may be 30 per cent., it follows, that during these three years the loss sustained by the community, on the whole trade, has been nearly 5 per cent. If each particular year be examined, we find that the value of the imports in the year ended 31st May, 1836, is 1,253,296*l.* The value of the exports is 1,651,439*l.*, being a surplus of about 32 per cent., to meet the 30 per cent., paid for labour, added to the prime cost of the raw material. In the year ended 31st May, 1837, the cost of the imports amounts to 1,248,776*l.*, whilst the exports are only valued at 1,284,862*l.*, shewing a surplus of nearly 3 per cent., to meet 30 per cent., the cost of the labour of converting the raw material into manufactured articles. To diminish this loss it is proper to state that, from the excessive importation, it is likely that a large quantity of the raw material may have remained on hand unmanufactured, as the demand for several articles was very limited. But, however much we may be inclined to allow for this circumstance, it is not of such extent as to compensate for the deficiency in the value of the exports; and therefore it must be confessed, though we state it with sorrow, that the trade during this period presents very unsatisfactory results.

In the year ended 31st May, 1838, the value of the imports amounts to 782,513*l.*, while the amount of the exports reaches 1,172,669*l.*, shewing an increase of nearly 50 per cent., to meet the additional cost of labour of about 30 per cent., added to the value of the raw materials of which the manufactured articles are composed. This would leave a profit of 20 per cent. Hence we may infer, although a part of this profit may probably be the price of part of the raw materials imported in the former year, that trade is again resuming its wonted state; and that the injurious effects which arose from our unfortunately excessive importations and exportations are at an end; and we may cherish the hope, that the intelligence, industry, and enterprise, of the mercantile community of this place, may realize the fair mercantile profits to which their exertions fully entitle them.

Estimated Value of the Principal Articles Imported and Exported at Dundee, during each year from 1st June, 1835, to 31st May, 1839.

	Year ended 31st May, 1836.			Year ended 31st May, 1837.			Year ended 31st May, 1838.			Total Quantities.	Total Value.	Average Quantities.	Average Value.	Average Prices.
	Quantity.	Price.	Value.	Quantity.	Price.	Value.	Quantity.	Price.	Value.					
IMPORTS.														
Flax	16,629	46s.	764,934	22,461	36s.	808,596	13,624	33s.	476,840	52,714	2,030,370	17,571	683,456	39 1/2
do. Codlin	5,393	27s.	145,611	8,279	20s.	165,580	3,784	18s.	68,112	17,456	279,303	3,818	126,974	27 13/4
Hemp	6,213	23s.	142,893	1,768	20s.	35,340	1,980	30s.	59,112	9,471	340,639	3,157	90,213	27 13/4
do. Collin	1,330	18s.	23,940	1,641	20s.	32,820	811	30s.	16,240	3,782	72,960	1,260	24,386	19 3/8
Lime	71,680	3s. 6d.	23,940	67,811	3s. 6d.	22,820	811	3s. 6d.	9,117	101,568	33,538	63,862	11,179	0 3/8
Coals, English	163,667	4s. 6d.	58,525	168,436	4s.	61,667	281,991	4s.	56,388	734,910	134,910	231,354	51,686	0 4/2
do. Scotch	290,623	4s.	88,125	226,623	4s.	44,125	184,829	4s.	56,388	695,577	139,116	231,839	46,372	0 4/2
Ashes	14,787	30s.	22,180	10,047	30s.	15,070	7,153	30s.	10,729	32,607	47,973	10,662	15,993	1 10/0
Timber	13,724	5s.	68,620	11,630	4s. 10s.	52,353	7,253	4s. 10s.	32,638	32,607	153,553	10,869	61,197	4 13/4
Iron	3,984	10s.	39,840	4,244	12s. 10s.	33,030	6,240	12s. 10s.	78,000	14,468	170,800	4,822	56,963	11 13/4
Tallow	300	2s.	600	458	38s.	1,738	217	38s.	412	1,832	1,179	892	1 1/8	8 1/8
Tar	100	14s.	70	2,438	15s.	1,828	1,000	15s.	750	3,558	2,646	1,179	892	30 13/8
Whale Blubber	321	20s.	6,420	205	35s.	7,380	197	38s.	7,092	721	20,892	241	6,964	10 16/8
Bone	336	8s.	2,688	219	11s. 10s.	2,518	203	13s.	2,639	758	7,845	252	2,615	10 16/8
Wheat	14,678	2s.	29,356	11,790	2s.	23,580	13,032	2s. 10s.	28,630	39,520	85,666	13,173	28,522	2 3/4
Salmon	1,660	5s.	8,300	4,160	5s.	20,800	5,188	5s.	25,940	11,008	55,040	3,669	18,346	5 0/0
			1,362,932			1,355,156			899,063		3,617,191		1,203,730	
EXPORTS.														
Onaburps	106,227	46s.	244,322	66,724	40s.	133,448	72,932	38s.	138,608	245,903	516,378	81,967	172,126	1 4/4
Shetlings	184,327	50s.	460,818	188,386	50s.	470,965	155,375	48s.	468,900	568,098	1,400,683	189,352	466,894	2 9/4
Cotton Baggings	21,941	48s.	382,783	79,649	40s.	159,293	23,216	35s.	40,628	262,359	582,711	97,453	194,237	2 1/0
Sundry ditto	99,863	30s.	149,708	125,496	28s.	40,386	14,576	35s.	25,508	66,610	115,096	18,870	38,345	2 0/0
Sail Cloth	60,369	43s.	135,830	72,136	30s.	175,694	21,004	27s.	136,355	346,305	480,727	115,435	162,919	1 8/4
Sacking	63,262	60s.	189,798	72,136	45s.	108,169	90,901	30s.	136,355	223,388	380,373	74,466	126,791	1 15/0
Donwals	15,619	30s.	30,048	16,749	40s.	63,498	16,171	42s.	166,973	215,388	520,143	71,796	173,381	2 9/0
Sundries	298	37s.	5,506	768	63s.	2,462	275	61s.	838	1,351	3,833	450	1,284	2 3/4
Wheat	32,719	28s.	45,906	24,130	27s. 6d.	33,178	24,220	33s.	30,963	81,069	118,948	27,023	30,649	1 9/6
Barley	427	22s.	493	123	22s. 6d.	33,138	200	23s.	260	750	879	27,023	30,649	1 9/6
Oats	354	24s.	463	25	22s.	36	182	41s.	260	561	694	187	301	1 12/8
Peas	21	34s.	35	114	50s.	285	40	50s.	100	175	420	58	140	2 4/8
Flour			1,608,900			1,290,982			1,214,194		4,283,977		1,411,823	

That a great commercial and manufacturing place, such as Dundee has now become, must, from time to time, suffer from commercial crisis, no person of the least observation can doubt; but that these reverses will be overcome, and be followed by periods of greater prosperity, is equally certain, as the community are employed in the production of articles which are not dependent upon the caprices of fashion, but are necessary for the comforts of life, and which only will cease to yield a profit when they are produced, as we have seen during the period we have been reviewing, in such quantities as to cause the supply greatly to exceed the real and effectual demand.

In the preceding review of the trade of this place, I have not taken into view the profits which are realized from, or the losses sustained by, the exportation of goods to foreign markets. It is difficult to procure data from which any general inference can be drawn as to any particular period. The general conclusion is, that the export trade, upon the whole, produces a profit, otherwise it would not be continued.

The value of the goods exported is made up from the prices in this market, without regard to their future value.

Report upon the Operations of the Paris and other Savings' Banks in France, during the Year 1837. Presented by the President, M. BENJAMIN DELESSERT, to a General Assembly of Administrators, 31st May, 1838. Translated by the Rev. H. LONGUEVILLE JONES, Corresponding Member of the Statistical Society of London.

[Read before the Statistical Society of Manchester on the 4th December, 1838.]

I AM going, in the name of the Directors, to give you an account of the operations of the Savings' Bank of Paris during the year 1837.

Several obstacles have been raised during the year by ill-disposed persons, on the occasion of a law, the provisions of which are in reality advantageous to those whom it concerns.* Savings' banks have been exposed to reiterated attacks, the concealed objects of which were certain political designs; but, I am happy to say, they have surmounted all these difficulties. The uneasiness that had crept into the minds of a small number of depositors soon disappeared, and we have not been long in restoring entire confidence to an establishment created for the more numerous classes of society, and the immense advantages of which are becoming felt by them more and more every day.

* This refers to a law which passed the Chambers during 1837, for enabling the administrators of savings' banks to transfer the monies in their hands to the "Caisse des Dépôts et Consignations," a board under the direction of government; by which operation they would, in reality, receive a rather higher rate of interest than they could have procured had they purchased public securities themselves—the board, from its immense operations, generally conducting business on very advantageous terms, and buying in at peculiarly favourable moments. It was, however, considered that government was trying in an underhand manner to get the deposits into its own hands as a kind of secret service fund; and the consequence was a run upon the Paris Savings' Bank during March and April, 1837, to a large amount. The panic then subsided.

The following is a summary of the results of 1837:—

The Savings' Bank of Paris has received,—

	Fr.
From 178,583 deposits	84,363,536
From 235 transfers	190,158
From dividends on stock	1,844,571
Total Receipts	26,398,265

The Payments on the other hand have been,—

	Fr.
To 52,335 depositors	25,713,565
By 241 transfers	207,137
Total Payments	25,920,702

	Fr.
Increase on the year	477,563
This sum being added to the balance due to } depositors on 1st January, 1837, viz. . . }	50,209,047
Gives a total sum due to depositors, on 31st } December, 1837, of }	50,686,610

This sum is thus distributed:—

	Fr.
In deposit at the Caisse des Dépôts et Con- } signations }	50,232,677
Cash, and bank book.	387,433
Balance of municipal subsidy	5,000
Value of 62,535 fr. for 5 per cent. stock belong- } ing to the savings' bank }	61,500
Total	50,686,610

If the savings' bank had converted its stock, &c. into cash on the 31st of December, it would have had a disposable sum of 1,300,000 fr.

When we compare these results with those of the preceding year, we find that the deposits in 1837 have been less than those in 1836 by 2,493,588 fr.; and the reimbursements greater by 9,172,485 fr.; while the sum actually due to the depositors at the end of 1837 is greater than that due at the end of 1836 by 477,563 fr. This balance, it is true, is much less than the increase of preceding years, during which the amounts of deposits were annually augmented by several millions. Thus—

	Fr.
The increase in 1833 was	6,033,264
„ 1834 „	11,457,884
„ 1835 „	14,026,169
„ 1836 „	12,143,627

This result is due chiefly to the reimbursements effected in March and April. We have every reason to believe that the Savings' Bank will, during the present year 1838, resume its progressive tendency; for, during the first five months, the deposits have exceeded the reim-

bursements by 4,500,000 fr., from which we may expect that the total increase on the year will exceed 10 millions of francs.

If we recapitulate all the operations of the Paris Savings' Bank from its first foundation, 15th November, 1818, up to 31st December, 1887, we shall find that during these 19 years it has received—

	Fr.
From 1,829,643 depositors	155,712,113
Gain from interest and arrears	10,915,275
Total Receipts	166,627,388
Reimbursements to 272,955 depositors	115,940,777
Due to depositors, December 31st, 1887	50,686,611
 The number of new depositors in 1887 was	 27,769
The number of depositors paid off was	23,689
 So that at the end of 1887 the number of depositors } had been increased by	 4,080
The total number of depositors at the beginning of } the year was	 80,798
Total number of depositors, 31st December, 1887	84,878
 Since its first foundation the savings' bank has en- } registered depositors	 263,301
It has paid off depositors	178,423
Difference	84,878
	Fr.
The average value of each deposit in 1887 was	149
„ „ reimbursements	495
„ „ total sum credited to each depositor	597

These results are nearly the same as those for 1886.

The time, expense, and trouble, that would be caused by a complete classification of all the depositors, according to their occupations, have prevented us from drawing up a complete statistical account; but we have taken an account of this kind for the new depositors during the three first months of this year; and the recapitulation of it shews some satisfactory results:—

Out of 8,456 new depositors,
3,417 belonged to the working classes;
2,183 were servants;
560 „ clerks, &c.;
213 „ soldiers;
2,081 followed different occupations;
2 were benefit societies.

It appears from this that 5,600 depositors have been among the classes of workmen and servants, the very persons in favour of whom savings' banks have been more particularly instituted. There is every reason to expect that 30,000 new depositors will be registered in the books this year, whereas, in 1887, the number of new depositors was only 27,000. The Censors will present to you a more detailed report upon the order and exactitude with which all the transactions of the Savings'

Bank have been conducted. I will, however, remark, that the deposits, reimbursements, and transfers have given rise during the year to 231,394 different operations, and that 169,756 accounts current have been calculated and regulated. The twelve subsidiary banks have continued to render the greatest services; those of the eighth and sixth arrondissements of the capital having had the greatest amount of receipts:—

The Succursal Savings' Bank of the 8th arron-}	Fr.
dissement received	1,979,000
Ditto . . ditto . . . 6th arrondissement	1,876,000

These facts are worthy of notice, because these two arrondissements contain the greatest number of workmen, and, at the same time, the greatest number of dealers in wine, who, whether rightly or wrongly, are generally reckoned as not giving much assistance to savings' banks. We are able every day to appreciate more and more the advantage of the central position and internal arrangements of the office. The total expense for the year amounts to 67,092 fr., out of which 31,833 fr. have been covered by the sum given by our worthy colleague, M. Davilliers; and 10,000 fr. by that which Count d'Argout, Governor of the Bank of France, has had the kindness to place at our disposal. We beg these generous donors to receive the testimony of our gratitude on behalf of all supporters of the institution of savings' banks.

The transactions relative to the transfers of deposits from one savings' bank to another, authorized by law 5th June, 1835, are becoming daily more extensive. Last year, 476 deposits, amounting to 397,295 fr., were transferred to other savings' banks, and these changes have been of great use to soldiers and workmen changing their place of residence.

We have nothing to add to the details contained in last year's report upon the crisis that took place in March and April, 1837, on occasion of the law which transferred our funds to the "*Caisse des Dépôts et Consignations*." In the month of March 5,455,000 fr. were paid back to depositors, and in April 5,809,000 fr. were paid back. The activity, however, with which the Savings' Bank effected these numerous reimbursements was not slow in re-establishing confidence. The same panic was also felt in several savings' banks in the departments, which, however, shewed the greatest zeal in immediately satisfying all demands. The savings' bank at Nantes was that where the reimbursements were the most considerable: from 13th March to 22d May that bank paid back 1,164,000 fr., or rather more than one-third of the total deposits. A great number of savings' banks did not feel this crisis at all; and, in general, it may be said, that the passing storm served only to consolidate and develop the institution, as well as to shew its utility and strength.

Believing that you will be glad to hear the summary of the results of savings' banks in the departments, and that you will learn with satisfaction all the good effects they have produced, I shall state them briefly to you. The utility of savings' banks appears to be shewing itself more and more every day; and it is only to be regretted that certain localities do not sufficiently profit by them. In general, persons of all shades of political opinion are agreed upon contributing to their success.

The clergy almost everywhere continue to shew themselves very favourable to our institution.

There have been established—

From 1818 to 1832	17 Savings' Banks.
In 1833	9
1834	48
1835	85
1836	44
1837	45
Total	248

There still remain five departments in which no savings' banks exist—the Creuze, the Lozère, the Higher and Lower Alps, and Corsica. It is a matter of surprise not to find any in several large towns, such as Aix, Arles, Vienne, Narbonne, Riom, Issoudun, Moissac, Ville-neuve d'Agen, &c. On the other hand, however, several savings' banks have established succursal ones in order to extend the benefits of the institution to the inhabitants of country districts. The savings' bank of Meaux may be mentioned as one of these, having founded six others in the principal places of as many cantons: all these succursal banks operate admirably. The savings' bank of Amiens has eight succursal ones; Beauvais, in the Oise, has 5; and Senlis 9. In this department, the Oise, there are 18 savings' banks, principal and succursal included:—this is a good example to be followed. The accounts of the transactions of all the savings' banks of France, from their commencement to the close of 1837, present the following results:—

	Fr.
Sums received by Savings' Banks of Departments, from the time of their foundation up to 31st December, 1836	89,362,399
Ditto reimbursed by ditto	42,449,626
Balance due to depositors on 31st December, 1836	45,912,773
Sums received by ditto, during 1837	33,708,475
Sums reimbursed	23,043,185
Difference	10,665,290
Total due to depositors on 31st December, 1837 .	56,578,063
	Fr.
Number of accounts opened by depositors up to 31st December, 1836	151,092
Accounts paid off	57,550
Accounts on books, 31st December, 1836 . . .	96,542
New accounts in 1837	53,446
Accounts paid off	29,522
Difference	23,924
Total of accounts open on 31st December, 1837 .	120,466

If to these results be added those of the Paris Savings' Bank we shall have—

		Fr.
Total value of deposits for all France, up to 31st	}	288,710,186
December, 1837		
Ditto reimbursements		181,445,512
Total due to depositors.		<u>107,264,674</u>
		Fr.
Number of accounts opened		470,839
Ditto paid off.		<u>265,495</u>
Total accounts open on 31st December, 1837		<u>205,344</u>

Since the commencement of the year 1838 the deposits have been increased by two or three millions of francs, after deducting the reimbursements; and, if this rate of progress continues, it is probable that at the end of the year the total sum due to depositors will be nearly 140 millions of francs.

The average value of each account in the savings' banks of departments is 470 fr., while in Paris it is 597 fr. It should be remarked, however, that if we compare the sums deposited with the number of inhabitants in the principal towns, we shall find that the average for each inhabitant is—

	Fr.		Fr.
In Paris	55	In Nantes	36
Versailles	80	Rouen	26
Metz.	56	Marseilles	19
Bordeaux	47	Lyons.	14

This result shews that in large towns these institutions are far from having attained the development which they ought to have. On the other hand, however, the success of savings' banks in our great maritime ports is very remarkable.

Thus, while at Lyons, the second town in France, the average of deposits, calculated as above, is only 14 fr. for each inhabitant, this average amounts at Toulon to 67 fr., at Brest to 56 fr., and at L'Orient to 56 fr. At Cherbourg, also, and at St. Brieux, the deposits are very considerable, and the opportunity of finding establishments which may save up sailors' money, and make it productive during their voyages, is a most favourable circumstance for our marine population. The most favourable instance of the operation of savings' banks, that of Versailles, is to be noticed: the population is 29,000, and the amount of deposits is 2,345,000 fr.

When we peruse the accounts sent in by the administrators of the various savings' banks, we cannot but feel esteem and gratitude for such an assemblage of worthy citizens who have devoted their time to promoting the prosperity of savings' banks; and, if the limits of this report allowed us to enter into such details, you would be highly interested in seeing all the good that they have effected. How many workmen have found in savings' banks a certain resource against the day of misfortune or unforeseen calamities! How many young men have been able to deposit in them, by little and little, sums sufficient to

procure them substitutes for military service! We have ascertained that several young females, after having accumulated in the savings' banks the fruits of their assiduous labours, have been able to pay off the debts of their fathers, and to redeem them from prison. A great number of marriages have been facilitated by savings placed in this manner; and, in particular, the report from Beauvais mentions an interesting case of two young people, who, the day before they were to be married to each other, met undesignedly at the savings' bank to draw from it the deposits that were to serve for setting them up in the world.

If we turn our attention to other countries, we shall find that the number of savings' banks is considerably on the increase.

We learn from Rome that the savings' bank is going on very successfully there, and is continuing to exercise the most happy influence upon the common people.

The Minister of the Interior of Sardinia having demanded the Statutes and Regulations of the Paris Savings' Bank, they have been forwarded, and a savings' bank has been established at Turin, where it is now in full operation.

A national savings' bank has been recently established in the kingdom of Hungary; and the deposits made in it are to be employed in undertakings of general utility.

Switzerland, which, according to the researches of M. Alphonse de Candolle, seems to have been the first country where savings' banks were established, possesses them at present in all her towns.*

In England, the sum total of deposits existing in the hands of the Commissioners of the National Debt amounted, at the end of last year, to 512 millions of francs; and the augmentation upon 1836 was found to be 22 millions.

The report then proceeds to give some details relating to the disposal made of certain sums deposited in the savings' banks by the Duke of Orleans, on the occasion of his marriage, in favour of the most deserving pupils of the primary schools; viz. 40,000 fr. for Paris, and 80,000 fr. for other towns in France.

It also contains some remarks made by the Mayor of Dinan upon the improvident habits of the working classes, and a recommendation from that officer that masters of manufactories should come to an understanding not to admit any workman into their premises who cannot produce an account at a savings' bank.

The report concludes by stating, that common soldiers are beginning to profit largely by savings' banks, especially when they receive money to continue in the service as substitutes for persons drawn on the conscription lists; which money, by the army regulations, is now paid into the savings' banks on account of the receiving party. As an instance of the habits of saving thus forming in the army, it is stated that when the 53d regiment of the line came from Charleville into garrison at Paris, there was transferred from the savings' bank of the former town to that of the metropolis, on account of 79 sub-officers, soldiers, and

* State of Swiss Savings' Banks in 1835 (*Helvétie*, April 10, 1838):—

100 Savings' Banks in all the cantons, with 165 Bureaux. Number of depositors, 60,028. Value of deposits, 11,513,712 fr.

musicians, the sum of 62,839 fr., giving an average account for each of these individuals of nearly 800 fr.

A subsequent report from the Minister of Commerce to the King (*Moniteur*, June 28, 1838,) gives a summary of the operations of the savings' banks of the departments of France, and of the capital, up to the end of 1837. We extract from it the following points:—

Out of 97,872 accounts standing in depositors' names on 31st December, 1836, throughout all the departmental savings' banks, when compared with the total amount of their accounts, viz., 46,367,802 fr., we find the following proportional divisions:—

Classes.	No. of Accounts.	Total Amount.	Average Amount.
<i>Fr.</i>		<i>Fr.</i>	<i>Fr.</i>
500 and under	66,606	11,955,510	179
501 to 1000	18,143	12,501,642	689
1001 to 2000	9,681	13,227,173	1,366
2001 to 3000	2,735	6,173,746	2,257
3001 and upwards	707	2,509,729	3,549
Total and general average .	97,872	46,367,802	473

Professions.	No. of Accounts.	Total Amount.	Average Amount.
		<i>Fr.</i>	<i>Fr.</i>
Workmen	26,946	12,123,577	449
Servants	24,527	10,086,463	411
Clerks, &c.	4,899	3,369,029	687
Soldiers and sailors	3,674	2,452,893	667
Different professions	21,259	13,971,174	657
Minors	16,288	4,156,247	255
Benefit societies	279	208,415	747
Total and general average .	97,872	46,367,798	473

It appears from the above that the classes of workmen and servants possess more than half of the accounts existing in the books of savings' banks, and nearly half of the sums deposited.

Towns.	Workmen's Accounts (opened in 1836.)	Value of Accounts. <i>Fr.</i>
Lyons	2961	1,028,015
Metz	2489	
Bordeaux	1483	1,161,746
Rouen	1468	
Nantes	1162	
Marseilles	1054	678,766

For servants' accounts, in 1836, the towns ranked as follows:—Bordeaux, Metz, Nantes, Lyons, Rennes, Rouen, and Marseilles. For value of ditto, thus:—Bordeaux, Nantes, Marseilles, Metz, Rouen, Lyons, Rennes.

Of the naval ports, Brest had the greatest number of accounts open and the highest value. The others ranked as follows : L'Orient, Cherbourg, Rochefort, and Toulon. At the last of these ports, by a curious coincidence, no sailors had any accounts open.

Of the commercial ports, Nantes had the greatest number of accounts open, and the highest value. The rest ranked as follows : Marseilles, Bordeaux, Havre, and La Rochelle.

The towns in which the greatest number of new accounts were opened in 1836 ranked thus :—

Lyons	2539	Lille	1343
Bordeaux . . .	2031	Versailles . .	1204
Nantes	1774	Metz	1160
Marseilles . .	1523	Strasburg . .	1112
Rouen	1431	Mulhausen . .	1056

The report concludes with a congratulatory view of the state and prospects of savings' banks throughout the country.

Statistics of the Parish of Ramsbottom, near Bury, in Lancashire.

By P. M. M'DOULL, Esq.

[Read before the Statistical Section of the British Association, 24th August, 1838.] *

THE following statements were drawn up in one of the best districts of Lancashire, by Mr. M'Douall, who states his belief that the greater part of that county will shew a similar result.

The number of cottagers examined was 309 ; of which the furniture was good in 294 cases, and in 5 it was bad. In 137 instances there was one bed-room, and in 172 there were two.

The following table exhibits the number of persons in each family, distinguishing those who occupied one or two bed-rooms.

Number of Individuals in each Family.	Occupying one Bedroom.		Occupying two Bedrooms.	
	Families.	Individuals.	Families.	Individuals.
1	..	..	..	4
2	9	18	4	8
3	14	42	14	42
4	21	84	15	60
5	24	120	24	120
6	25	150	25	150
7	24	168	16	112
8	5	40	25	200
9	5	45	17	153
10	4	40	11	110
11	3	33	6	66
12	2	24	4	48
13	1	13	4	52
14	..	..	7	98
Total .	137	777	172	1,223

* This paper completes the account of the Proceedings of the Statistical Section at the late Meeting of the British Association, the remaining papers having been already published in the Journal, Nos. 5 to 7.

The total number of families therefore was 309, consisting of 2000 individuals, or nearly $6\frac{1}{2}$ members to a family. Among the families occupying only one bed-room, the average number of members was nearly $5\frac{1}{2}$ to each, but it will be seen that 20 contained from 8 to 13 each.

The number of males was 968, of females 1032; 285 were married couples, of whom only 5 were without children, and 24 were widows. The number of lodgers was 83, of whom 50 were males, and 33 females. In 9 cottages there was no married couple, and in 9 there were 2 residing together; of the 2000 persons, 123, or 6.15 per cent., were above 50 years of age, viz., 81 above 50, 28 above 60, 11 above 70, and 3 above 80.

Wages.—The total number of persons of all ages receiving wages was 1134. Mr. M'Douall obtained the number of individuals in each family who were in the receipt of wages, with the number who were to be supported in each, and from these data has constructed the following table. The two columns of weekly receipts and proportion of money to each person supported is estimated in this manner: it was found that in one of the best factories in the district, the average sum paid weekly per head, taking all the hands indiscriminately, was 10s. Applying this average to the number of hands in each family receiving wages, the total receipts of each family may be found, and this sum divided by the number of persons to be supported, will shew the average sum applicable to the support of each individual.

TABLE OF WAGES.					
Number of Persons in each Family receiving Wages.	Number of Families.	Total Number of Persons receiving Wages.	Total Number of Persons to be Supported.	Total Estimated Weekly Receipts.	Average Estimated Proportion to each Person per week.
All, viz., 5	13	65	65	£. s.	s. d.
1	51	51	200	25 10	10 0
2	50	100	248	50 0	2 6 $\frac{1}{2}$
3	45	135	257	67 10	4 0 $\frac{1}{2}$
4	41	164	286	82 0	5 3
5	42	210	313	105 0	5 8 $\frac{1}{2}$
6	30	180	260	90 0	6 8 $\frac{1}{2}$
7	14	98	157	49 0	6 11
8	7	56	73	28 0	6 2 $\frac{1}{2}$
9	5	45	64	22 10	7 8
10	3	30	38	15 0	7 0 $\frac{1}{2}$
Not known.	8	Not known.	39	..	7 10 $\frac{1}{2}$
Total . .	309	1,134	2,000	567 0	..

Education.—The number who could read was 1319, or 66 per cent. of the whole number, and 531, or 26.5 per cent., could write. The number in each family who possessed this degree of instruction is shewn in the following table:—

TABLE OF EDUCATION.						
Number of Persons in each Family.	Able to Read.		Not able to Read.	Able to Write.		Not able to Write.
	Families.	Persons.		Families.	Persons.	
All.	77	461	..	2	14	..
1	26	26	73	86	86	419
2	54	108	180	62	124	266
3	32	96	105	29	87	109
4	35	140	98	27	108	95
5	25	125	59	6	30	10
6	17	102	50	4	24	17
7	14	98	28	3	21	7
8	7	56	7	1	6	1
9	4	36	9	1	9	5
10	6	60	12	2	20	15
11	1	11	10	..	..	..
None.	11	..	50	86	..	525
Total .	309	1319	681	309	531	1469

Few of these persons read or write well—the majority are learners : but the table shews that education is progressing in Lancashire. The means of instruction in this parish are Sunday, day, and factory schools.

An Approximate Statement of the present Extent and Value of the Manufacture of Glass in the United Kingdom.

No. 1.—Number of Men, Women, and Children employed in the Manufacture of Glass in the United Kingdom :—

I Crown Glass Manufacture . .	1800
Bottle „ . .	1840
Flint „ . .	3490
Broad „ . .	45
German Sheet Glass Manufacture . .	65
Plate „ . .	1500

Total . . 8740 earning 450,000*l.* annually.

Average per head per annum, 51*l.* 9*s.* 9*d.*

N.B. Few Women are employed except in polishing Plate Glass.

No. 2.—Value created by Glass Manufactures in 1837 :—

	<i>£.</i>
By Crown Glass	299,226
Bottle „	181,149
Flint „	541,914
Broad „	10,789
German Sheet Glass	13,884
Plate „	91,870
Total	<u>1,138,832</u>

No. 3.—Cost of Glass Manufactures :—

In Labour	£450,000
Materials	200,000
Coals, &c.	250,000
Rent of Premises, Interest of } Capital, and Profit . . . }	238,832
Total	1,138,832

No. 4.—Value of Materials used in the Composition of Glass :—

In Flint Glass	£82,000
Bottle „	59,000
Crown, German Sheet, & Broad, } being Window Glass . . . }	42,000
Plate Glass	17,000
Total	200,000

No. 5.—The Value created £1,138,832

Add Duty paid, after deducting drawback }
on exportation 610,120

Total Amount paid to the Manu- }
facturers for home use, and for }
what was exported. 1,748,952

Add for Retailers' profit, 10 per cent. . . 174,895

Estimated Sum paid by Consumers 1,923,847

No. 6.—In France there were employed, in 1836, } 10,497 persons.
in the Glass Manufacture
The Value created was 47,474,301 francs.
Equal, in round numbers, to 1,900,000*l.* sterling.
In the United Kingdom, in 1837, there were }
employed in all branches of Glass Manu- }
facture. 8,740 persons.
The Value created was 1,138,832*l.* sterling.

Moral Statistics of a Section of the City of Norwich. Communicated
by W. FELKIN, Esq., F.S.S.

THE district contains 330 families, 1275 inhabitants, and 7 houses of ill-fame. 14 families were without the Scriptures; 220 adults could not read; 27 adults professed Christianity openly; 30 professed to be Infidels; 465 children were under 12 years of age; 204 attend Sunday schools; and there were 606 persons above 5 years of age, exclusive of the aged and sick, who never attend any place of worship.

These people are employed generally in weaving; and by working 12 hours a day, they may earn 10*s.* a week each. As the whole of the children old enough to work are employed, the families may average, during 9 months in the year, 20*s.* a week; during 3 months in each year, however, the looms are standing still from one cause or another, which produces much distress. They drink beer to a great extent, and are not very provident; nevertheless, they help one another very

freely, and if any are afflicted, a little purse is often made up by women collecting for the case. There are benefit clubs established amongst these weavers generally. Infidelity and republicanism have made considerable inroads amongst them; and there is a shop in the district where the writings of Paine, Carlile, Voltaire, and Volney, as well as many periodical publications of a deleterious kind, are sold, and which are very extensively read. The depression of the trade of this city, during the last two years, has reduced the more careful and sober work-people to a condition of considerable suffering; and it has been painful to witness them parting with one piece of good furniture after another, to enable them to buy bread. Their feelings have been soured, and their principles undermined, in many instances, by these heart-rending circumstances.

Moral Statistics of a District near Gray's Inn, London, in 1836.

Communicated by W. FELKIN, Esq., F.S.S.

THE locality is about 90 yards square; and the dwellings form courts and lanes, having intersecting narrow passages. It contains 200 houses, inhabited by 521 families, of whom 49 are those of respectable shop-keepers; these were not visited, therefore 472 families, containing 1700 persons, are here described. Several families (in one instance 11) live in one house. Generally each family occupies only one room, and that sometimes a cellar or kitchen under-ground. Little or no social feeling is exhibited amongst the neighbours; they seldom speak except to quarrel; cruelty, revenge, and oppression, are frequently practised upon each other. Sickness, sorrow, and death occur, and often no one heeds the sufferer; the widow and the fatherless may weep as in the solitude of a desert. These people live to themselves; and, until recent exertions of the police, the neighbourhood abounded with thieves, who still visit their old haunts. The nearest places of worship are a church and a dissenting chapel, both of which are some hundred yards off, and which present the only accommodation for religious instruction for 10,000 souls. In the following schedule, the courts, &c. are numbered. The following observations refer to these numbers:—

No. 1.—This is the best part of the district.

No. 2.—Inhabitants desire instruction.

No. 3.—Distress is here confined to widows, aged, infirm, and gin-drinkers.

No. 4.—Chiefly journeymen shoe-makers. But little distress.

No. 5.—House of ill-fame here, in which mother and daughter live upon prostitutes. The mother entices servant-girls to leave their places, offers her house as an asylum, and detains them under various pretexts, until they have spent their money and lost their virtue.

No. 6.—This is a wretched place; the houses of ill-fame are of a shocking character. Early and excessive dram-drinking, and Sabbath-breaking, are practised to an awful extent. A widow keeps one improper house, and her daughter another, with several inmates.

No. 7.—Is a small court, in which there is one house of ill-fame.

No. 8.—This court is inhabited chiefly by Roman Catholics.

No. 9.—Only one family; they are Italians.

No. 10.—A lane, in which are a number of little shop-keepers, who receive stolen goods.

No. 11.—In this place the house of ill-fame had two inmates.

No. 12 and 13.—No remarks.

No. 14.—Several of the families here would not allow the visitor to en'ter. The house of ill-fame had two inmates.

No. 15.—Chiefly inhabited by tradesmen.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Number of Houses . .	9	6	18	2	2	49	9	14	1	25	6	5	10	21	23	300
Number of Families . .	30	19	51	5	5	157	18	57	1	85	14	15	34	23	6	473
Number of Inhabitants.	81	41	238	26	21	480	74	300	†	306	50	48	123	61	16	1700
Children under 15 years of age	21	9	100	11	6	136	28	76	..	121	22	13	51	12	†	616
Attend Sunday Schools.	22	2	34	1	4	45	2	8	..	30	11	4	14	3	..	189
Families neglect Public Worship entirely* . .	9	9	25	3	3	70	13	53	..	66	5	11	18	14	4	302
Individuals who neglect Worship, and infants, sick, infirm, and aged .	23	29	134	19	11	261	58	174	..	293	21	34	76	30	8	1100
Families without Scrip- tures . . . . .	..	3	..	..	..	28	..	28	..	32	2	5	2	2	..	102
Adults who cannot read.	..	..	3	..	..	11	..	16	..	12	..	3	1	..	..	46
Houses of Ill-fame . .	..	..	..	..	1	3	1	..	..	..	1	..	..	1	..	7
Shops open on Lord's day . . . . .	..	..	..	..	..	15	..	4	..	15	..	..	..	10	10	54
Public houses, all of which are open during Sabbath . . . . .	..	..	..	..	..	..	..	1	..	2	..	..	..	2	1	6
Shops shut during Lord's day . . . . .	..	..	..	..	..	2	..	..	..	..	..	..	..	11	9	22

* But few attend worship regularly, and 17 persons only made serious profession of religion.

† Not known.

Turnpike Roads in England and Wales.

THE following statement exhibits the condition of all the turnpike trusts in England and Wales in the year 1836, the latest period to which the returns* have been made up, together with a comparison between that year and 1821.†

The number of trusts in England and Wales, in 1821, was 1025, and, in 1836, 1119, shewing an increase of 94 trusts; of these, 69 in 1821, and 68 in 1836, were in Wales. The distance of roads, in 1836, is not given; in 1821, it amounted to 18,244 miles in England, and 2631 in Wales; together, 20,875. The income from tolls and parish composition, in 1821, was 1,088,767*l.*, averaging 52*l.* 3*s.* 1½*d.* per mile. The income from the same two sources, in 1836, was 1,559,467*l.*, and exceeded that of 1821 by 43 per cent. As the distance of roads in the former year is not known, no certain account of the increase of produce

* See Commons Paper, Session 1837-38, No. 529.

† See Part III, of the Tables of Revenue, Population, and Commerce, p. 430.

per mile can be given; but the following estimate will serve in some measure to supply the deficiency. The average length of each trust in 1821 was $20\frac{1}{2}$ miles; if the same be allowed for each of the 94 additional trusts in 1836, the total length will be 22,788 miles, and the produce per mile 68*l.* 8*s.* 8*d.*, equal to an increase of 32 per cent. arising from a corresponding increase of internal communication by roads alone. The amount of that increase by steam and canal navigation is much greater, as has been shewn by Mr. Porter, in "The Progress of the Nation."

If we examine the returns of revenue and expenditure in the year 1836, of which an abstract is appended, together with a calculation as to the proportion of debt existing in each county, we find that the total income amounted to 1,776,586*l.*, but of this 130,348*l.* was money borrowed. If this sum be deducted, the actual receipts from tolls, statute duty, and contingencies, was 1,646,238*l.* The total expenditure was 1,780,349*l.*; but, in order to find the actual expense of maintenance, the debts paid off must be deducted, which amounted to 117,270*l.* The remainder is 1,663,079*l.*, which exceeds the income by 16,841*l.* To this annual deficiency (supposing the same state of finance to continue) is to be added a debt of 8,577,132*l.*, which, after deducting the arrears of income and the balances in the treasurer's hands, will amount to 8,159,311*l.* Of the former sum, no less than 1,031,096*l.* consists of unpaid interest. The amount of bonded or mortgage debts is 7,187,543*l.*, of which nearly 6,000,000*l.* bear an interest of $4\frac{3}{4}$ per cent.* Hence the total debts amount to four and a-half times the total annual income; but as the expenditure exceeds the income, and the arrears of interest already amount to one-eighth of the whole debt, there appears little probability of the debt being diminished by ordinary means. There is also reason to apprehend that the arrears of interest will increase, as the amount paid for interest in 1836 was only 318,381*l.*, while the interest upon the total debts, at $4\frac{3}{4}$ per cent., amounts to 407,413*l.* There was likewise a further sum of money borrowed in that year, of 130,348*l.* These particulars will be found in the first following table.

The second table shews the income, expenditure, debts, and assets, in each county of England, and in Wales, separately, together with the proportion which the debts bear to the annual income in each, or, in other words, the number of years in which, if the whole annual income were applied to the payment of the present debts, the whole amount (excepting the interest accruing in the period) would be paid off, and the per-centage proportion which the unpaid interest forms of the total debts. From the former of the two last columns, it appears, that the northern counties are generally the most involved in debt. They stand in the following order:—

Derby, $9\frac{1}{2}$ years.	Northumberland, $8\frac{1}{2}$ years.	Lancaster, $6\frac{1}{2}$ years.
Cumberland, $8\frac{1}{2}$ ditto.	Devon, $7\frac{1}{2}$ ditto.	York, $5\frac{1}{2}$ ditto.
Westmoreland, $8\frac{1}{2}$ ditto.	Nottingham, $6\frac{1}{2}$ ditto.	Sussex, $5\frac{1}{2}$ ditto.

* Of the total amount, 5,959,259*l.* bears interest at $4\frac{3}{4}$ per cent.; 505,629*l.* at 5 per cent.; 378,838*l.* at $4\frac{1}{4}$ per cent.; 263,224*l.* at $4\frac{1}{2}$ per cent.; and 80,593*l.* at 4 per cent.

The counties most favourably situated are—

Essex, $0\frac{1}{10}$ years.	Rutland, $1\frac{1}{10}$ years.	Hertford, 2 years.
Middlesex, $1\frac{1}{2}$ ditto.	Huntingdon, $1\frac{1}{10}$ ditto.	Suffolk, $2\frac{1}{10}$ ditto.

The last column of the table shews that the arrears of interest form, in Northumberland, no less than 38 per cent., or more than one-third of the total debts: in eight other counties it forms from one-fourth to one-fifth of the whole debt, whilst in Essex it amounts only to 27*l*.; and in Huntingdon and Durham to 1 and 2 per cent. respectively. The county most favourably situated in both respects is Essex.

R.

TABLE I.—*Abstract of Income and Expenditure of Turnpike Trusts in England and Wales, during the Year 1836.*

		£.	£.
Balance . .	in treasurers' hands on 1st January, 1836 . .	327,754	
, ,	due to treasurers on 1st January, 1836 . .	122,483	
			450,237
Income . . .	Revenue received from tolls	1,520,917	
	Parish composition in lieu of statute duty . .	38,550	
	Estimated value of statute duty performed . .	52,529	
	Revenue from fines	562	
	Revenue from incidental receipts	33,678	
	Money borrowed on security of tolls	130,348	
			1,776,586
Expenditure .	Manual labour	416,485	
	Team labour and carriage of materials	158,876	
	Materials for surface repairs	230,226	
	Land purchased	14,205	
	Damage done in obtaining materials	9,387	
	Tradesmen's bills	69,287	
	Salaries of treasurers	6,420	
	Salaries of clerks	21,284	
	Salaries of surveyors	65,150	
	Law charges	34,688	
	Interest of debt	313,381	
	Improvements	204,739	
	Debts paid off	117,270	
	Incidental expenses	63,416	
	Estimated value of statute duty performed . .	52,529	
			1,780,349
Debts	Bonded or mortgage debts	7,187,543	
	Floating debts	231,626	
	Unpaid interest	1,031,096	
	Balance due to treasurers on 31st Dec. 1836 .	126,865	
			8,577,132
Arrears of Income .	Arrears of tolls for current year	32,027	
	Arrears of parish composition for ditto . . .	8,059	
	Arrears of other receipts for ditto	5,103	
	Arrears of former years	38,862	
	Balance in treasurers' hands on 31st } December, 1836 }	328,374	
	Money in 3 per cent. consols, valued at 90 <i>l</i> . .	5,364	
			417,821

TABLE II.—*Statement of the Income, Expenditure, Debts, and Assets of the Turnpike Trusts in each County of England, and in Wales, during the Year 1836, with the Proportion which the Debts bear to the Annual Income, and the Per-Centage Proportion of Unpaid Interest to the Total Debt.*

Counties.	Income, including Money borrowed.	Expenditure, including Debts paid off.	Debts.	Assets, Arrears of Income.	Proportion of Debts, after deducting Assets, to Annual Income.	Proportion of Unpaid Interest to Total Debts.
	£.	£.	£.	£.	No. of Years.	Per Cent.
Bedford . . .	11,021	13,937	56,890	4,562	3·87	23
Berks . . .	17,671	16,847	58,650	5,731	2·99	3
Bucks . . .	19,258	19,656	60,342	4,195	2·91	27
Cambridge . . .	10,717	11,746	39,726	6,487	3·10	12
Chester . . .	61,417	64,285	329,129	12,114	4·92	5
Cornwall . . .	27,319	27,410	121,289	4,302	4·28	5
Cumberland . . .	15,448	14,568	135,810	1,771	8·67	17
Derby . . .	41,810	40,412	432,085	13,713	9·33	22
Devon . . .	62,024	62,702	505,333	19,900	7·82	8
Dorset . . .	22,475	21,914	125,706	7,977	5·23	4
Durham . . .	35,756	41,105	138,527	9,353	3·61	2
Essex . . .	34,109	33,462	32,098	4,564	0·80	nil.
Gloucester . . .	82,144	81,234	390,604	17,715	4·54	7
Hants . . .	27,610	28,590	153,621	10,613	5·18	20
Hereford . . .	27,261	27,031	76,673	6,607	2·96	6
Hertford . . .	30,257	31,426	63,912	6,171	2·07	9
Huntingdon . . .	11,699	11,282	25,167	2,175	1·96	1
Kent . . .	71,163	73,729	313,157	22,562	4·09	19
Lancaster . . .	154,285	155,348	967,819	26,762	6·09	8
Leicester . . .	28,325	27,638	98,355	4,885	3·30	10
Lincoln . . .	34,370	39,136	123,347	11,890	3·24	11
Middlesex . . .	98,608	96,503	150,717	6,333	1·46	9
Monmouth . . .	18,805	15,683	97,719	6,398	4·85	4
Norfolk . . .	16,016	15,821	61,337	6,122	3·44	3
Northampton . . .	37,990	36,701	142,320	8,614	3·52	26
Northumberland . . .	20,091	22,635	166,641	3,388	8·15	38
Nottingham . . .	17,885	18,073	128,887	5,964	6·86	7
Oxford . . .	24,784	24,826	107,047	9,132	3·95	9
Rutland . . .	5,804	5,610	11,763	564	1·93	3
Salop . . .	34,784	37,322	130,302	11,418	3·41	3
Somerset . . .	65,078	63,315	350,570	13,548	5·17	6
Stafford . . .	63,527	65,568	298,547	16,992	4·43	20
Suffolk . . .	10,972	12,035	34,277	3,402	2·81	16
Surrey . . .	63,134	63,776	193,295	9,023	2·91	17
Sussex . . .	61,530	54,751	366,612	16,026	5·69	24
Warwick . . .	34,685	34,742	112,838	7,813	3·02	8
Westmoreland . . .	7,159	7,084	62,297	1,565	8·48	3
Wilts . . .	38,529	33,349	144,577	12,842	3·41	13
Worcester . . .	42,251	40,837	132,778	8,244	2·94	9
York . . .	182,733	186,632	1,119,363	41,235	5·90	11
Total . . .	1,679,524	1,683,752	8,065,145	392,692	4·56	12
Wales . . .	97,061	96,596	511,986	25,129	5·01	8
Total . . .	1,776,586	1,780,349	8,577,132	417,821	4·59	12

PROCEEDINGS OF STATISTICAL SOCIETIES.

STATISTICAL SOCIETY OF LONDON.

Second Ordinary Meeting, Monday, 17th December, 1838.

G. R. PORTER, Esq. F.R.S., in the Chair.

AFTER the usual routine of business, a Report was read upon the Statistics of Crime at Preston during the year 1837-38, by the Rev. John Clay, Chaplain to the Preston House of Correction. The length of this paper renders it necessary that it should appear in a future number. At the conclusion, it was stated that this gentleman has adopted the form of Registry for Criminal Offenders prepared by a Committee of this Society, and published in the Journal at p. 174.

The following Candidates were balloted for, and elected Fellows of the Society :—

Adams, James John, Esq., Finsbury-square.
 Alston, John, Esq., Glasgow.
 Booth, Abraham, Newcastle-street, Strand.
 Cargill, William, Esq., Newcastle.
 Carr, Ralph, Esq., Hedgeley, Northumberland.
 Charlton, W. H., Esq., Hesleyside, Northumberland.
 Colquhoun, J. C., Esq., M.P.
 Dickenson, Rev. W., George-street.
 Dillon, J., Esq., Fore-street.
 Dunlop, Hon. H., Lord Provost of Glasgow.
 Finch, Francis, Esq., M.P.
 Griffith, Richard, Esq., Dublin.
 Hankey, Frederick, Esq., Lower Berkeley-street.

Hindmarsh, L. Esq., Alnwick.
 Jellicoe, Charles, Esq., Old Jewry.
 Keyser, Henry, Esq., Doughty-street.
 Nicholl, A., Esq., Newcastle.
 Paul, H. Baillie, Glasgow.
 Smith, F. G., Esq., Scottish Assurance Company.
 Spiller, J. R. Esq., Director of Northamptonshire Banking Company.
 Tancred, Thomas, Esq., West Cowes.
 Tulloch, J., Director of the Guardian Assurance Company.
 Wallace, R., Esq., Carshalton.
 Walsham, Sir J., Bart., Knill-court.
 Wansey, F. S. A., Esq., Riches-court.
 Wright, Rev. G., Trinity-square.
 Woolhouse, W. S. B., Esq., National Loan Company.
 Wyld, James, Esq., Charing Cross.

The following Gentlemen were proposed as Candidates for admission into the Society.

Greg, W. R., Esq., Manchester. | Rous, Hon. and Rev. Thomas.

The Council announced that they had appointed as Corresponding Members :—

Adam, William, Esq., of Calcutta. | Jones, the Rev. H. L., of Paris.

And recommended as Foreign Members, to be balloted for in January :—

Professor Bache. | Colonel Forsell.
 Professor Balbi. | M. Moreau de Jonnés.

Adjourned to the 21st of January.

STATISTICAL SOCIETY OF MANCHESTER,

Fifth Annual Report, October, 1838.

THE Annual Meeting of the Society was held at Mr. Langton's, in October, 1837, when officers for the ensuing session were appointed. Mr. Jas. Heywood read a report of the proceedings of the Statistical Section of the British Association, at Liverpool. Mr. William Greg, on behalf of the executive committee, delivered a memorandum of statistical desiderata, to which the attention of the Society should be directed during the session. Mr. William M'Connel presented a report, shewing the probable annual consumption of butchers' meat in Manchester.

At subsequent meetings during the session the following members made communications to the Society, viz.—

Mr. Samuel Greg, on Criminal Statistics; Mr. Meadows, on the Quantity of Coal brought into Manchester, in 1834; Mr. Samuel Greg, on Medical Statistics; Mr. Langton, on the Attendance at Churches and Chapels in York, obtained in 1836-7, by the Society's agent; Mr. James Heywood, Particulars of 175 families, living in Miles Platting, relative to their Occupations, Religion, Education, and Domestic Comforts—(See *Journal*, p. 34); Mr. W. R. Greg, on National Education; Mr. P. M. James, on the Past and Present Numbers of the Aborigines in the British Colonies.

At the sixth meeting, a printed collection of miscellaneous reports of the Society was laid upon the table. A committee had been appointed early in the session, to enquire into the state of education of the population of the townships of Pendleton, and a preliminary report was made by this committee.* At the last meeting of the Society the executive committee was empowered to take measures for carrying on an enquiry into the state of education in some strictly agricultural district:† a committee was appointed, to report on the best mode of obtaining a complete statistical return of crime in Manchester, on the various points of information which such a return ought to embrace, and how far such a return may be obtained from existing documents. At the request of the Society, Mr. Samuel Greg undertook to prepare a report of his enquiry into the state of education in Macclesfield.

STATISTICAL SOCIETY OF BRISTOL.

THE Annual General Meeting of the above Society was held on Friday, the 16th November.

Dr. Prichard, one of the Vice-Presidents, having been called to the chair, the Rev. J. E. Bromby, Hon. Sec., read the Annual Report of the Council, as follows:—

In making the Annual Report of the proceedings of an institution so recently founded, and so little known as the Bristol Statistical Society, it will not be amiss to touch upon the original design of its establish-

* This enquiry is now completed.

† The district chosen by the executive committee was the county of Rutland-shire, and the enquiry is now nearly finished.

ment, and the general objects it has in view; especially as, by these means, it will better appear that what has been effected so far is neither useless nor unimportant, and that the Council are not responsible for what has been left unaccomplished.

The original design of the Society was twofold. In the first place, it was considered that in a large mercantile city, like Bristol, there must be various series of facts connected with its commerce and general prosperity, capable, when constantly observed and registered, of shewing, by the simple inspection of tables, the fluctuating vicissitudes of its internal condition and of its trade with the different quarters of the world; that such documents would not be without their use to the citizen and merchant, and to the legislator might be often of the highest importance, by abiding as durable monuments for his guidance; that, however difficult it might be to reproduce these statistics belonging to the past, yet, by prospective caution in public and private offices, such tables might be compiled for the future with comparatively little inconvenience and sacrifice; that this branch of statistics would require no expenditure on the part of the Society, and their only duty would be to give encouragement to the collection of them, to receive them when collected, and to take care that they should be incorporated, at the proper opportunity, with those of the other commercial towns in the kingdom. It was further considered that, however dry and forbidding statistical researches generally are, there will, nevertheless, spring up, every now and then, zealots, as it were, in the pursuit, who are content, not only to keep registers like those alluded to above, but also to gather information from documents rendered difficult of access from their age, or from other causes, and that nothing was so likely to generate and foster such a zeal as the conviction that labours of this kind would be appreciated, and that means were in operation for giving the results of them a permanent existence and value.

This, then, was one branch of usefulness which the Society proposed to itself, but which, it was clear, from the beginning, would have to be left, in a great measure, to the operation of chance. They could not create at will the elements necessary for realizing the benefits they promised themselves. The leisure and taste for such a tedious employment might not readily be met with; and even where individuals had greater opportunities, and had devoted themselves to the compilation of useful facts, some time must evidently elapse before the Society would be in possession of results in such a form as to be sufficiently interesting for publication. The Council, therefore, cannot be said to be responsible for the progress of this division of statistical labour; they are able, however, to report that the past year has not been entirely without its fruits, and has exhibited the promise of more. Sub-committees have been formed to superintend the collection of life and medical statistics, and to prosecute an enquiry into the amount of Irish produce imported into Bristol. Returns have already been made of the number of marriages and burials that have taken place in the parish-churches of Bedminster, St. Mary Redcliff, St. Thomas, since the year 1813, and of St. John's since 1823.

The Society are indebted to the coroner, J. B. Grindon, Esq., for particulars of the inquests held in Bristol, from May 1, 1837, to May 1,

1838, being a continuation of a former return for the previous year. By the kindness also of Mr. J. A. Gardner, governor of the gaol, and Mr. Bishop, superintendent of the police, they have been put in possession of the criminal returns from the police office and gaol.

The second object which this Society has in view is of much greater importance, and, involving, as it does the expenditure of the funds of the Society, places the Council in a more responsible position. This is to make such a thorough investigation into the state of the poorer classes of society as to ascertain what means of instruction and improvement they either have or can command for themselves, or for their children, and how far they enjoy those comforts and conveniences which every man must enjoy before he is entitled to the epithet of civilized.

This subject may be presented in two points of view. To speak politically, there are few persons who, since the French revolution, are not aware of the formidable power of Sansculottism—a power overlooked and almost forgotten in periods of tranquillity, but which, nevertheless, exists in its miserable abode, and is ready, at any season of public weakness and agitation, to sally forth to its work of destruction—a power, indeed, so formidable as to give rise to the opinion that many imperfections in the government and laws of a country, and in the mode of administering them, ought to be endured, rather than run the risk of disturbing the slumbers of a monster whose waking hours are spent in such fantastic atrocities. At the same time, it is admitted, that this power is not always the same. Our own country has witnessed mighty revolutions, which have, nevertheless, been unstained by those heart-sickening horrors which signalized the national *bouleversement* in France. The question then arises, what are the influences that increase or diminish the sanguinary character of this occult power, or its capacity to do evil? May not remedies be applied which shall go far to extinguish its existence—which shall therefore place a man's liberties, and his honest title to the social comforts he enjoys, on a much more stable foundation—and which shall render practicable an amelioration of our statutes which the present state of things utterly precludes? In the solution of this question, the facts collected by the Statistical Society will not be without their use.

Or we may put the matter thus: we know, on good authority, that "the poor we have always with us;" and when we will, we may do them good. Now, in a simple state of society, a man may know tolerably well what his duties to the poor are. When the wealthier individual resides in the midst of his own dependents, and when the requisites of civilized life are produced and fabricated within a comparatively limited district, (say a patriarchal household,) the ordinary visitations of Providence are easily known, and as easily mitigated. The orphan, the widow, and the unfortunate, obtain a ready relief at the hands of a benevolent master or richer neighbour. To which may be added, that in a state of society, the reciprocal services of every member of the community produce an interchange of courtesy as well as of information, which subserves the purpose of an intellectual and moral education. A general medium of knowledge is diffused, and a general tone of elevated sentiment obtains. But what shall be said of that artificial and complicated state of things when a nation manufactures for half the world—when the consequence unavoidably is the enormous distance between

the labourer and his virtual and subdivided employer—when a person at the antipodes may feel his garment pleasant at his back, while yet the man to whom some portions of his gratitude is due may be pining with sickness at the distance of 12,000 miles—and when, finally, the lowest orders of society are crowded together in the same locality, and are removed from the benefits which a more immediate intercourse with their superiors would ensure? It is evident, therefore, that the principle of charity to the poor must undergo considerable modification, must indeed assume a new complexion, and shape itself to more comprehensive objects. Against actual starvation it is perfectly true that provision is made by the poor law enactments of the legislature. But is this enough? Are men to be just enabled to live but to be left destitute of everything which ennobles life, and makes it worth living for? Is not something more demanded from those who are stewards of the unrighteous mammon, and ought not more exertions and more sacrifices to be made to raise the mass of our population in the scale of civilization?

All this, however, is not within the province of the Statistical Society. The Society do not take these duties upon themselves. Their only object is to ascertain, as nearly as possible, what the actual exigencies are, and by an accurate exhibition of them, to rouse the community, and eventually the legislature, to take adequate measures to meet them. The Council felt, therefore, that they could not more profitably employ the small funds at their disposal than by continuing the poor enquiry mentioned in the last report. This has consequently been done. Upwards of 4700 families have been visited by their agent in the parishes of Temple, St. Michael, St. James, and St. Philip. The returns thus accumulated are somewhat voluminous. It was the intention of the Council, by their own individual exertions, to reduce them to a tabular form. That task, however, much as they wished to see it executed, has been found to require more time and attention than any of them could, amid other engagements, reasonably afford. A further sum, therefore, will be required to effect this object; and it would be highly desirable, also, if the remaining parts of the city which have not been visited were included, to complete the enquiry. It will be seen, by the treasurer's account, that the funds of the Society are at present more than exhausted; and it is feared that some delay must be experienced before even this advantage can be realized. The Council, therefore, close their report with an earnest appeal to the Society, and through them to the public, for further assistance. This assistance might be rendered by an increased number of subscribed members, or, at all events, by small donations, to be devoted to the purpose above mentioned.

Rawson W. Rawson, Esq., of the Statistical Society of London, has been elected an honorary member of this Society. Arthur Palmer, Esq., Park-row, John Taylor, Esq., George Webb Hall, Esq., W. D. Bushell, Esq., R. Poole King, Esq., John Hare, senior, Esq., John Hare, jun., Esq., Charles Savery, Esq., have been elected ordinary members of this Society.

The following works have been presented to this Society:—A work on the Equitable Assurance Society, by John Addington, Esq.; seven numbers of the Journal of the London Statistical Society, by that So-

ciety ; three copies of Vol. I., Part 1, of the Proceedings of the Liverpool Statistical Society, by that Society.

C. B. Fripp, Esq., Treasurer, read the audited account, by which it appeared that the receipts, including a balance of 11*l.* 15*s.* 8*d.* from last year, amounted to 48*l.* 5*s.* 8*d.*, and the expenditure to 89*l.* 0*s.* 9*d.*, leaving a balance against the Society of 40*l.* 15*s.* 1*d.*

Mr. T. Sanders suggested the propriety of obtaining more correct reports of births from the dispensaries. At present not a single double birth was reported, whilst the number of children born was greater than the number of births : again, it appeared that the proportion of female children to males was greater by 30 ; such a return, he believed, was unexampled, as, he believed, everywhere else the number of males was greater than that of females, in the proportion of 1 in 20. He had no doubt that a regular application from the Council to the Dispensary committees would procure for them accurately prepared returns. Dr. Prichard said, the proportions of male and female births often differed according to the circumstances of marriage, &c. ; amongst illegitimate births the proportions varied considerably.

Mr. T. Sanders said, his only object was to procure a correct return, and concluded by moving the adoption of the report, which, having been seconded by W. H. Castle, Esq., was carried unanimously.

Votes of thanks to the Marquis of Lansdowne, President, and Dr. Prichard and J. W. Cowell, Esq., Vice-Presidents, with a request that they would continue their services, having been unanimously adopted, Dr. Carpenter rose to propose a vote of thanks to C. B. Fripp, Esq., Treasurer, accompanied by a similar request. He said that it was to be regretted that that gentleman's labours were not more appreciated ; indeed, he could not account for the apathy of the wealthier members of society with regard to this institution otherwise than by believing that its claims had not been fully brought under their notice. He regarded it as one of the most useful precursors of benevolent exertion. Benevolence had been much injured by the indiscriminate exercise of its bounties, and in the present very complicated relations of society they could only look to the operations of such institutions as theirs for a secure means of improving the social condition. In country places he was aware that it was not so difficult for benevolent individuals to discriminate and to bestow their claims so as to benefit society ; but in large cities and towns statistical enquiries were of the very greatest moment. He had seen the last report of the Statistical Society for Manchester, and he was surprised at the amount of information it afforded—information highly useful for all the purposes of social improvement. It would be worth while for the Council to consider whether some means could not be taken for interesting the wealthier classes ; he was afraid that it was thought by some that the Society was a political one, than which nothing could be further from the truth : it was true that its results might be made subservient to the most important purposes connected with political economy, but with anything like party politics it had nothing to do. He really wished their claims could be brought fully under the notice of their wealthy fellow-citizens. What was their condition ? He was sorry to find that they were without the means of making a tabular statement of the information which had been already collected by their agent. Surely such informa-

tion must be highly interesting and important, not only to the minister of religion and the medical man, but even to the merchant; and, indeed, for all the great purposes of social improvement.

G. W. Hall, Esq. fully concurred in what had fallen from Dr. Carpenter; it was entirely in accordance with sentiments which he had ever held. During the last week the munificent sum of 2000*l.* had been collected for benevolent purposes, and he greatly feared that if it were distributed without a proper precursor—enquiry—injury would be thereby done to society. Mr. Gutch concurred in what had fallen from the preceding speakers. The Chevalier de Mascarenhas considered statistical details of the highest importance, inasmuch as they formed the basis upon which the political economist must rest his efforts for the improvement of mankind.

J. Ham, Esq. thought the suggestion of Dr. Carpenter well worthy of attention, and he, for one, would be happy to assist in canvassing his wealthy fellow-citizens in behalf of the Society. Mr. Gutch suggested that an application should be made to the three benevolent societies, as if, out of their funds, they only contributed 20*l.* each to the Statistical Society, it would be of great benefit to it. He should be happy to press their claims upon many members of the Dolphin Society. Mr. C. B. Fripp considered the suggestion a very reasonable one, and said he would urge it upon the attention of the committee of the Anchor Society. After some further observations, it was resolved, upon the motion of Mr. Gutch, seconded by Mr. C. B. Fripp, "That the chairman be requested to write to the Three Colston's Societies, soliciting donations from their funds."

Thanks were then voted to the other officers of the Society; to the Committee of the Institution for the use of its room, and to the Chairman; and, some statistical returns from the superintendent of police and the governor of the gaol having been read, the members proceeded to ballot for 9 members of the Council in the room of those retiring. The following gentlemen were elected:—Rev. G. N. Barrow, J. M. Gutch, V. F. Hovenden, F. W. Newman, Charles Pinney, Dr. Symonds, William Tothill, G. W. Hall, Thomas Sanders.

STATISTICAL SOCIETY OF LIVERPOOL.

THE Annual Meeting of the Statistical Society of Liverpool took place on the 19th October, Viscount Sandon, M.P. in the chair. The following is a list of the several papers read or laid before the meeting:—1st, Some Remarks on the Effects and Operation of Strikes, by an Artizan; 2nd, A paper on the peculiar Characteristics and Resources of Great Britain, by John Merritt, Esq.; 3rd, the Liverpool Bill of Mortality for the second quarter of the year 1838. 4th, Criminal Returns to Michaelmas, 1838, by the Chaplain and Governor of the Liverpool Borough Gaol; 5th, an Analysis, as far as complete, of the Returns made by the Agent of the Statistical Society of Liverpool, into the Condition of the Poor Population in part of that Town, by W. H. Duncan, Esq. M.D. Hon. Sec.; 6th, Returns shewing the Extent of Emigration, from Liverpool, since the Establishment of a Government Agent at that

Port; 7th, Tabulated Returns from the Northern Hospital, prepared by W. H. Duncan, Esq. M. D. Hon. Sec.; and 8th, Some Returns relating to the Trade between Liverpool and Ireland, from 1833 to 1837, by J. W. Harden, Esq. Hon. Sec.

STATISTICAL SOCIETY OF ULSTER.

THE first Anniversary Meeting of this Society was held on the 1st of November, the Marquis of Donegall, President, in the chair. A number of members, whose names were on the Proposal List, having been admitted, the Society proceeded to the election of officers for the ensuing year.

Mr. Bruce then read the first report, which he had prepared at the request of a former meeting, "on the Charitable Institutions of Belfast." Mr. Bruce's report was confined to a history of the Charitable Society, from the year 1753 to 1776. The earliest notice of the society was stated to be in the year 1753, when an advertisement appeared with a lottery scheme for raising a sum of money for the double purpose of building a poor-house, and rebuilding or repairing the parish-church, which was in a ruinous condition. Another lottery was held in 1767. When the building was commenced, the committee had a nett amount of 7592*l.* on hand. The prices of building-materials at this time (1771) were as follows: bricks, not laid down, 10*s.* to 12*s.* per thousand; lime, laid down, 11*d.* to 1*s.* per barrel; Cultra sand, 1*s.* 4*d.* per ton; building stones, 2*s.* 2*d.* per ton; other stones, 1*s.* 10*d.* per ton. One remarkable item of expenditure appears at this time on the books; an iron chest, *ordered from Holland*, which cost 8*l.* 17*s.* 6*d.* The report also contained several important facts respecting the number of poor relieved at different times, the lease of the water-works obtained by the corporation, and the sums of money expended.

Mr. R. S. M'Adam, who had reported at a former meeting on mechanical power employed in this neighbourhood, reported the progress of the enquiry.

Captain Portlock, R. E., Vice-President, then read to the meeting the report of the Council for the last session, in which, after pointing out the steps which had been taken to form the Society, and the circumstances in which it had originated, the advantage of statistical enquiry to the political economist, and, of course, to the statesman, were urged, and the fact dwelt on of so long a period having elapsed from the time of Bacon, when physical science became in his hands one of induction, till the period still recent, when a similar plan of investigation was applied to legislation.

The different associations which had been formed for the collection of statistical knowledge were then mentioned, as well as the publications of the London Society, particularly the journal established under their auspices, wherein the information collected by separate societies is likely to be brought together.

The report mentioned that the Society had now in operation committees, all of which had made some progress, on the following subjects:—

Education—trade between Great Britain and Ireland—the physical and intellectual condition of the working classes—agriculture—mechanical power in this neighbourhood—steam navigation—charitable insti-

tutions—medical statistics—medical education—classification of crime—moral and intellectual condition of criminals—literary and scientific institutions—inland communication—mines and minerals;—these enquiries being confined to the province of Ulster.

The object of the educational committee, besides enquiring into the general state of instruction, is, as far as possible, to procure an account of all literary societies existing in Ulster, particularly of reading societies in rural districts. To shew the importance of the investigation of the trade to Great Britain, several striking facts were stated, and it was shewn how important it is to ascertain how and in what form Ireland receives a return for the produce of her soil. The report then pointed out the necessity of ascertaining the actual physical and intellectual condition of every nation which is the subject of legislation. It would be as absurd for a physician, however skilful, to pretend to prescribe for a patient, whose disease and its causes he had failed to investigate, as for the lawgiver to make laws for a state of whose condition he is ignorant.

The importance of enquiring into the state of agriculture, and of carrying out the investigations of the other committees, was then pointed out—that on the classification of crime originated with a communication from a member, exhibiting the state of crime in Ireland in a tabular form for each month from July, 1836, to February, 1838. The intention is to classify crime for Ulster on the same plan, another committee, at the same time, enquiring into the state of education amongst the criminals.

The report concluded by directing the attention of the members to the propriety of procuring, if possible, statistical surveys of the different parishes of Ulster, which it was hoped, from the number of members residing in various parts of the province, might be effected. It was recommended to persons pursuing this branch of enquiry to procure the sheets of the Ordnance Survey containing the parish they wished to investigate, which would very much facilitate their operations; even these, by the use of a few simple colours and marginal notes, might in themselves be made very interesting statistical documents.

The report having been received, and the draft of a prospectus of the objects and plan of the Society agreed to, the attention of the Society was directed to a communication received from Sir R. A. Ferguson, Bart. M.P., one of the honorary Vice-Presidents, conveying to the Society the result of his enquiries into the Grand Jury assessments of the counties of Tyrone and Derry, as exhibited in a tabular form. The object of these enquiries is to render more palpable to all connected with county affairs, the real extent of the tax called the county cess, by removing it from the obscurity of gross sums to the more tangible shape, for comparison of poundage on property. When viewed in this way, it appears that there are great discrepancies in the several baronies, and, that in some of those of Tyrone the cess has mounted up to the extraordinary rate of more than 4s. in the pound on the Government valuation.

Sir R. A. Ferguson, it was stated, is also preparing a classification of the total poundage, under distinct heads, as follows:—*Communication*—Roads, Bridges, &c. *Benevolence*—Dispensaries, Hospitals, Infirmarys, &c. *Instruction*—Schools. *Justice*.—Jails, Police, Officers. *Finance*—Collectors, Treasurer, &c. By which arrangement the cause as well as the extent of increase of county cess will be clearly shewn.

MISCELLANEOUS.

Abstracted from Parliamentary and Official Papers.

Trade of Jamaica.—The average annual value of goods exported from the United Kingdom to Jamaica in the six years from 1832 to 1837 was 1,461,710*l.*; the average annual value of such goods re-exported from Jamaica during the same period was 433,468*l.*

Royal Forests in France.—In 1837 the total number was 1473, containing 1,019,139 hectares, equal to 2,517,273 acres. Their total approximate value was estimated at 29,079,736*l.* averaging 1*l.* 1*s.* per acre.

State Property in France.—The total value of property of all kinds belonging to the State, in France, including buildings appropriated to the public service, or religious worship, and forests, was, in 1837, 51,091,824*l.*, of which 347,420*l.* was not applicable to the public service.

Town Population of France.—The total population of France in 1836 was 33,540,910, of which number 4,951,684, or 14½ per cent., inhabited the chief towns in each arrondissement.

Inland Navigation of France.—The number of canals completed in 1837 was 74, and their length, 2300 miles; the number of rivers is 133, and the extent of their navigation at the same period was 1530 miles, making altogether 7430 miles of inland navigation.

Tower Hamlets' Court of Requests.—Number of causes entered for debts not exceeding 40*s.*: in the year 1829, 29,961; in 1830, 28,375; in 1831, 27,388; average, 28,574: in the year 1833, 15,744; in 1834, 13,688; in 1835, 11,744; average, 13,725: decrease 52 per cent. Number of causes entered for debts above 40*s.* and not exceeding 5*l.*: in the year 1833, 2816; in 1834, 2533; in 1835, 2097.

Southwark Court of Requests.—Number of causes entered for debts under 40*s.*: in 1835, 13,278; in 1836, 14,353; in 1837, 14,474. For debts above 40*s.*: in 1835, 3414; in 1836, 3350; in 1837, 3333.

Duchy of Cornwall.—Income in year ended June 1838: total 28,456*l.*; viz., rents, 5567*l.*; tin duty on coinages, 19,679*l.*; dividends on stock, sales of land, &c. 496*l.*; coals taken on rates from ⅓ to ⅔ of the free-share, 2630*l.*; Stannary Court fees, 83*l.* Expenditure in the same year: total, 12,670*l.*; viz., salaries, 5342*l.*; annuities and salaries to Stannary officers, with tithe on tin, 2892*l.*; audit expenses, 352*l.*; surveys, 19*l.*; incidental expenses, 685*l.*; coinage expenses, 953*l.*; donations and charities, 125*l.*; extraordinary payments, 490*l.*; law expenses, 1734*l.*; poundage, 75*l.*

Duchy of Lancaster.—Income in year ended 20th June, 1838: total, 23,038*l.*; viz., rents, 21,843*l.*; dividends on stock, 791*l.*; grants in fee, 119*l.*; grants of rents, and enfranchisement of copyholds, 219*l.*; small branches of revenue, 64*l.* Expenditure in the same year: total, 14,126*l.*, viz. salaries, 7651*l.*; poundage, &c. 1145*l.*; stipends and charities, 993*l.*; annuities, &c., 1526*l.*; fees to counsel, surveys, &c., repairs, &c., tradesmen's bills, 1407*l.*; travelling and audit charges, 242*l.*; Queen's plate, Lancaster races, 105*l.*; expenses at Needwood games, 111*l.*; Savoy church, 227*l.*; office expenses, 439*l.*; investment in funds, 276*l.*

Royal Canal, Ireland.—This work was begun in 1789; in 1812 the company by which it was undertaken became bankrupt, with a debt of 862,000*l.* Irish. In February, 1823, 1,421,954*l.* had been expended upon the canal, giving an average expenditure of 10,780*l.* per mile.

Grand Canal, Ireland.—Total expenditure for construction of the canal, to February 1823, 1,645,601*l.*, exclusive of 93,258*l.* expended on the Shannon navigation, and 122,149*l.* on the Grand Canal Docks at Dublin.

A further List of Statistical Papers, printed by the Houses of Parliament during the Session of 1837-38.—(Continued from page 446.)

- No. HOUSE OF LORDS.
352. Public Bills—Number brought up from the Commons in each month, 1837-38.
359. Tower Hamlets' Court of Requests—Number of Causes entered, 1829-35.
374. Transportation—Report of Select Committee of the House of Commons.

HOUSE OF COMMONS.

529. Turnpike Trusts—Income and Expenditure, England and Wales, 1836.
658. Postage—Second Report of Select Committee.
716. Holyhead Road—Fifteenth Report of Commissioners, 1838.
721. Woods and Forests—Fifteenth Report of Commissioners, 1838.
723. Public Loans, Ireland—Sums advanced and not repaid.

PRESENTED BY COMMAND OF HER MAJESTY.

Report of Commissioners for enquiring into the State of Registers of Births, Deaths, and Marriages.

Pluralities, England and Wales, in the year 1831.

Number of Livings.	Number of Clergymen whose Second Living					Total.
	Does not exceed, per Annum,				Does exceed, per Annum.	
	£. 50	£. 100	£. 150	£. 200	£. 200	
Two, one of which does not exceed } £50 per ann. }	5	19	19	11	44	98
„ „ £100 „ }	..	102	109	58	178	447
„ „ £150 „ }	..	..	48	89	215	352
„ „ £200 „ }	..	..	..	42	274	316
„ both of which exceed £200 „ }	..	..	..	..	643	643
Total number holding 2 livings . .						1,856
„ 3 „						352
„ 4 „						57
„ 5 „						3
						2,268

In the Account of the Trade in Foreign Wheat, contained in the last number,* at page 507, the Annual Summaries are incorrect in consequence of the month ended the 5th of January having been treated as the first month in each year instead of the last month in the preceding year. The necessary correction is made in the following statement:—

Years.	WHEAT.				WHEAT-FLOUR.			
	Imported.		Paid Duty.		Imported.		Paid Duty.	
	Foreign.	Colonial.	Foreign.	Colonial.	Foreign.	Colonial.	Foreign.	Colonial.
	Imp. Qrs.	Imp. Qrs.	Imp. Qrs.	Imp. Qrs.	Cwts.	Cwts.	Cwts.	Cwts.
1828	568,203	14,965	728,101	14,965	48,239	18,075	43,243	17,693
1829	1,596,088	8,772	1,338,459	7,197	460,093	5,256	333,855	4,997
1830	1,413,990	53,901	1,508,321	47,076	609,649	58,191	509,222	45,944
1831	1,659,424	197,855	1,102,450	109,560	1,544,369	97,377	927,061	82,983
1832	293,066	97,874	165,870	160,035	131,877	92,104	55,927	102,132
1833	165,436	82,188	1,004	55,936	62,882	107,209	653	75,088
1834	84,401	47,169	163	45,706	87,572	61,982	89	65,637
1835	30,587	15,943	47	16,287	59,124	24,997	266	41,919
1836	162,989	1	971	18,583	224,939	24,981	564	36,228
1837	452,060	310	210,436	22,347	288,130	53,633	2,298	36,553

Average Prices of Corn per Imperial Quarter in England and Wales, with the Rate of Duty on Foreign Wheat, during each Week of the Month of November, 1838.

	Weeks ended November					Average of the Month.
	2nd.	9th.	16th.	23rd.	30th.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat—Weekly Average .	69 5	72 11	73 10	73 4	73 1	72 6
„ Aggregate Average .	65 10	67 6	69 0	70 3	71 6	68 10
„ Duty on Foreign .	21 8	18 8	13 8	10 8	6 8	
Barley	32 2	33 6	34 3	34 1	33 7	33 6
Oats	22 11	23 1	23 8	24 1	24 3	23 7
Rye	37 3	38 11	39 3	41 0	42 5	39 9
Beans	39 3	40 2	41 0	40 2	40 11	40 5
Pears	41 3	42 11	42 8	43 0	44 0	42 9

A Statement of the Number of Colonists who were settled in each District of Western Australia in June, 1837.

Districts.	No.	Districts.	No.	Districts.	No.
Perth . . .	590	York . . .	65	Varse . . .	21
Fremantle . .	387	Plantagenet .	170	Total . .	1847†
Swan River .	524	Murray . . .	17	Military, with families	185
Canning River .	41	Augusta . .	32	Total . .	2032

* The account for the month ended 5th December is not yet published.

† Of these, 788 are males above 14 years, of whom 506 are married. The Population in 1832 was 1510, including the Military.

Rates of Three Months' Exchange at Danzig on London in each Month and Year, from May, 1826, to November, 1838.

MONTHS.	1826	1827	1828	1829	1830	1831	1832
	Sil. gr.	Sil. gr.	Sil. gr.	Sil. gr.	Sil. gr.	Sil. gr.	Sil. gr.
January .	..	205½	201	200½	209½	198	207½
February .	..	209	205	200½	209½	199½	207½
March ...	..	207½	203½	201	210	200	209½
April ....	..	206½	203½	202½	208½	196½	208½
May.....	204½	204½	203½	202½	206½	198½	208½
June	207½	203½	202½	201½	203½	199½	208½
July.....	207½	203½	203½	203	201½	200½	208½
August ..	212	205½	202½	203½	201½	202½	210
September	207½	205½	203½	204½	200½	205½	210
October ..	207½	204½	200½	205½	197½	206½	210
November	208½	202½	200½	209½	199½	206	20½
December	206½	201½	200½	209½	198½	206½	218½
Average	207½	205½	202½	203½	203½	202	208½

MONTHS.	1833	1834	1835	1836	1837	1838
	Sil. gr.	Sil. gr.	Sil. gr.	Sil. gr.	Sil. gr.	Sil. gr.
January .	209	205½	206	208½	203	206
February .	209½	205½	206½	208½	203½	205½
March ...	209½	205½	205½	206½	203½	206½
April	208½	205	205½	205½	203½	205
May.....	207½	206	205½	204½	202	203½
June	207½	204½	205	202½	201½	203½
July.....	206½	205½	205½	203	203	203½
August ..	205½	206½	206½	202½	204½	201½
September	206	205½	208	201½	204½	202½
October ..	206½	205	207½	201½	205½	202½
November	206½	205½	208	199½	205½	201½
December	205½	205½	208½	201½	204½	*
Average	207½	205½	206½	203½	203½	

* On the 4th of December the rate was 200½, and on the 7th, 200½.

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ended 6th February, 6th March, 16th November, and 11th December, 1838.*

Quarters ended	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
	£.	£.	£.	£.	£.	£.
6th Feb. . .	18,206,000	11,266,000	29,472,000	22,569,000	9,542,000	32,111,000
6th March . .	18,600,000	11,533,000	30,133,000	22,792,000	10,015,000	32,807,000
16th Nov. . .	18,900,000	8,949,000	27,849,000	21,171,000	9,339,000	30,510,000
11th Dec. . .	18,469,000	9,033,000	27,502,000	20,707,000	9,362,000	30,069,000

* These two averages have been here published in order to complete the series for the year 1838, the remainder having already appeared in the Journal.

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